Service Manual

PlateWriter™ 3000/8000

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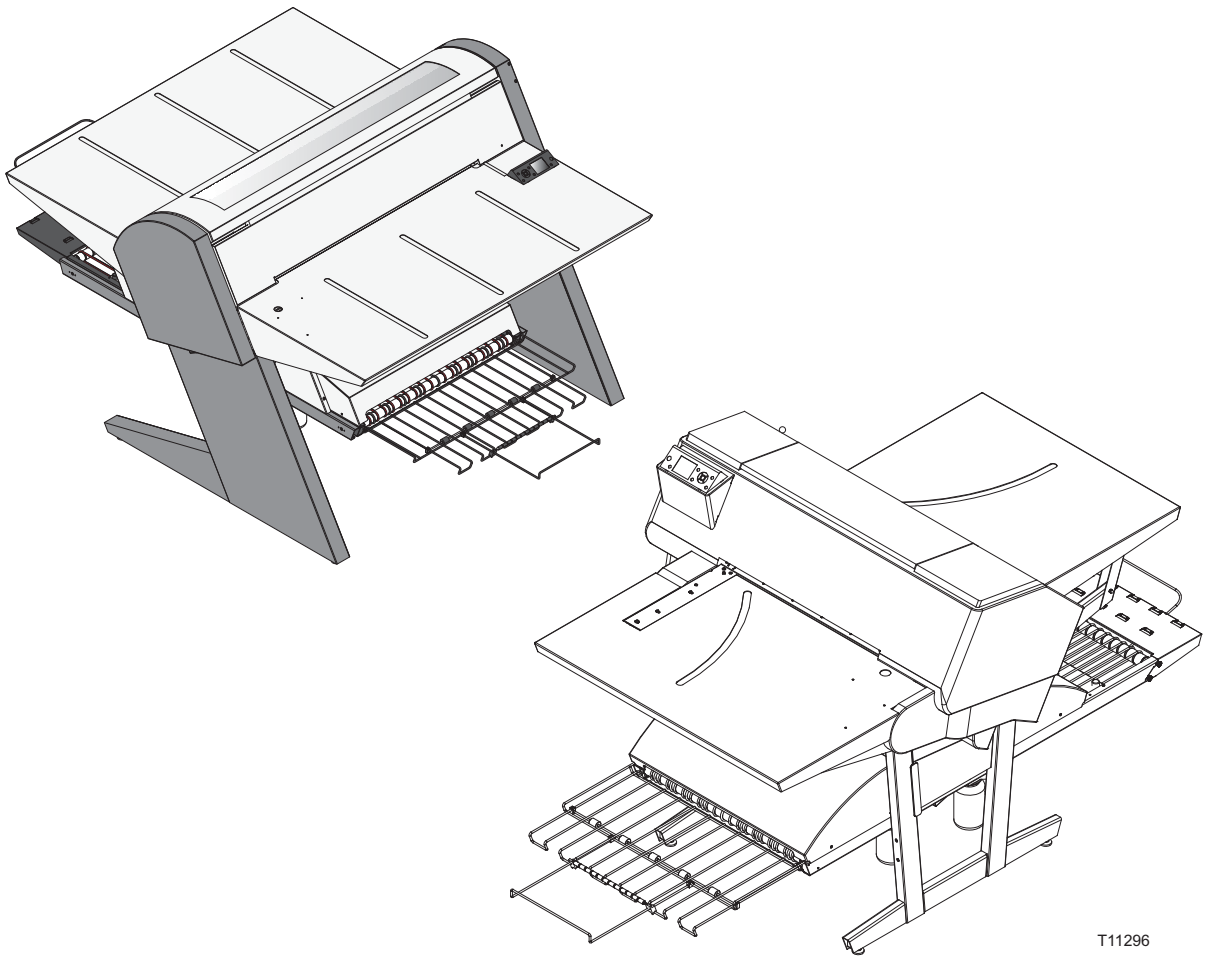

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Part 1: Introduction

About this manual

Intended use of this manual

- This manual describes how to install software and firmware to the PlateWriter 3000 or PlateWriter 8000 system. The procedures described in this manual require a reasonable level of technical skill and access to the proper tools.

Reservations

- This manual was written and illustrated using the best possible information available at the time of publication.
- Any differences between this manual and the equipment reflect improvements introduced after the publication of the manual.
- Changes, technical inaccuracies and typographical errors will be corrected in subsequent editions.
- As a part of our policy of continuous improvement, we reserve the right to alter design and specifications without further notice.

Important

Unintended use of the equipment

Glunz & Jensen A/S do not take any responsibility for any damage or accidents caused by unintended use of the equipment:

- As the equipment is certified by accredited test laboratory (UL International Demko A/S) it is absolutely prohibited to make any modifications, electrical nor mechanical, of the equipment. If however this prohibition is disregarded, Glunz & Jensen's warranty will no longer apply and the certification labels for UL, C-UL, and CE certification of the equipment shall be removed as the certification will no longer apply to the equipment.

Installation

- Never install the equipment in explosive environments.
- It is the responsibility of the owner and operator/s of the equipment, that the installation is made in accordance with local regulations, and by engineers authorized to carry out electrical installations.
- Installation must be performed only by service technicians who are trained in installing the equipment.
- The manufacturer cannot be held responsible for any damage caused by incorrect installation of this equipment.

Notes, cautions, and warnings !

Throughout the manual notes, cautions, and warnings are written in bold like the example below:

Always replace a fuse with one of the same size and rating as the old one.

Symbol	Meaning	Explanation
	Note	The operator should observe and/or act according to the information in the order to obtain the best possible function of the equipment
	Caution	The operator should observe and/or act according to the information in the order to avoid any mechanical or electrical damage to the equipment.
	Warning	The operator should observe and/or act according to the information in the order to any personal injury.

Chemicals

- It is responsibility of the owner of this equipment that data is available to concerning possible health risk from the chemicals used with the equipment.

"End of lifetime" disposal

- The equipment is designed for easy disassembling. All disposal of parts from the machine must be made according to local regulations. For recycling purposes significant components are marked with material specification according to the ISO 11469 standard.

Service assistance

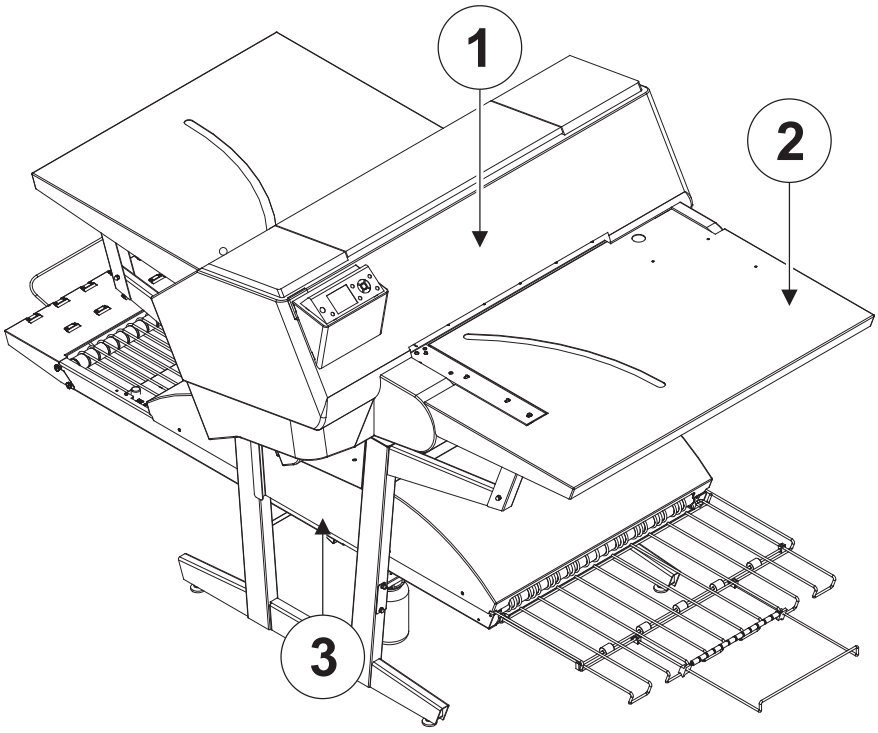
- If help is needed to correct any problem with the equipment, please contact your local supplier.

The Functional description of the PlateWriter system

The system is an innovative and patented inkjet Computer-to-Plate (iCtP) device.

The System consists of:

- **Plate Writer engine (1)**
  A specially modified Epson inkjet printer that uses 's fluid to image the i-plates printing plates.
- **Plate input table (2)**
  A table for aligning plates prior to entering into the engine.
- **Proofer** (option)
  An unmodified Epson Stylus Color 4800, 4880 or 7800, 7880 printer used for proofing. Plug-ins to drive these printers are supplied with the Harlequin RIP.
- **Harlequin RIP platform**
  A customized workstation accessible by both Mac and PC computers, loaded with the Global Graphics Harlequin RIP.
  The Harlequin RIP provided is customized by Xitron and it accepts PostScript, PDF, EPS, TIF & JPEG files produced by standard pre-press applications.
  It RIPs the data and sends output to the engine or to the Proofer.
- **Plate Writer finishing unit (3)**
  An integrated plate finisher that executes all of the steps necessary to produce press-ready plates, e. g.: curing, gumming and drying of the plates after they are imged in the engine.



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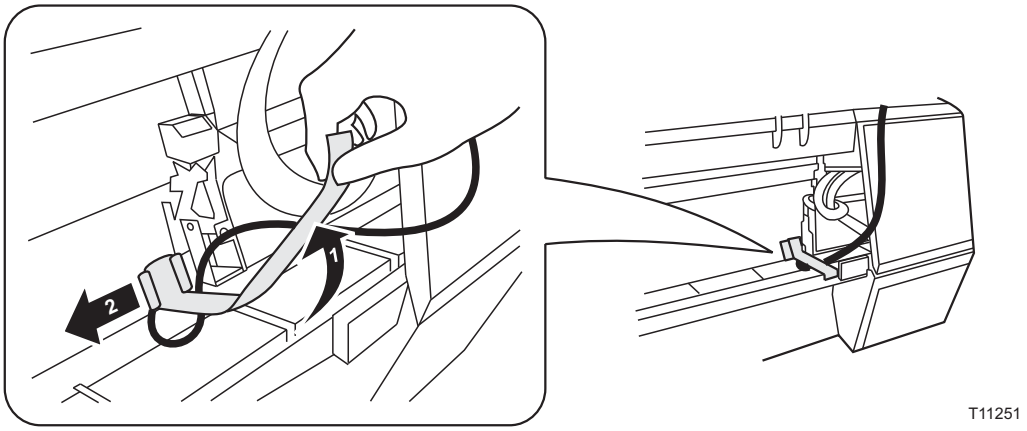
Part 2: The Printer

Initial startup of PlateWriter

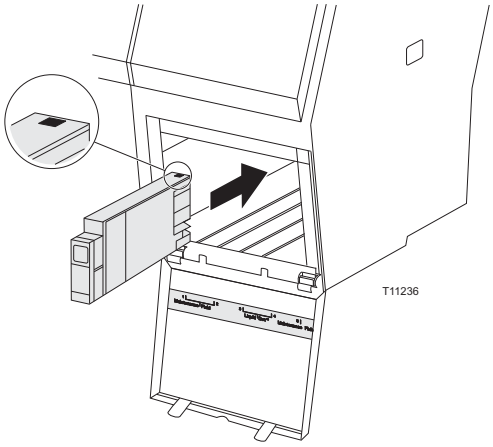
- Remove all the packing materials and tape. Check carefully for all the tape inside and outside the printer

After removing packing materials, touch a metallic part of the printer to prevent generating static electricity.

- Pull the protective material out of the print head.

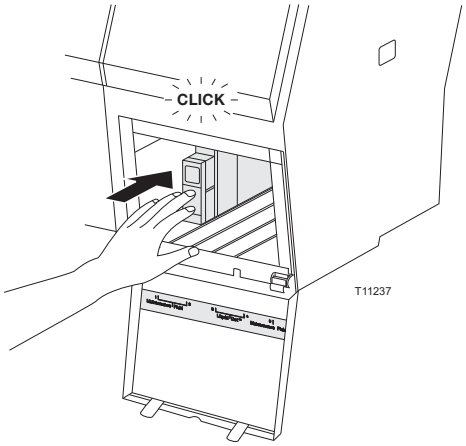


Installing ink cartridges



- Press the ⏻ power button to turn on the printer.
- When **REPLACING INK CARTRIDGE INSTALL INK CARTRIDGE** flashes on LCD display, then press 🔧 button, select **OPEN RIGHT COVER** and press OK button. Approximately after 20 seconds the ink cover is unlocked and slightly opened.
- Open the ink compartment cover by hand fully.
- Remove each fluid cartridge from its package.

⚠ **Do not touch the green IC chip on the side of the ink cartridge. Doing so may prevent normal operation and printing.**



- Install the 2 x Liquid Dot and 3 x Maintenance Fluid cartridges in the printer according to the label on the inner side of the ink cover as shown. Hold each cartridge with the green IC chip facing up and pointing to the rear of the printer, and then insert it into its slot as far as it will go until it clicks. Liquid Dot and Maintenance Fluid cartridges can in principle be placed in any slot. We recommend to place Liquid Dot in slot 3 and 4 (PK and Y) and the Maintenance Fluid into slots 1,2 and 5. After ink has been charged the cartridges should normally remain in their respective positions. They can be moved in case of e.g. nozzle loss, please refer to the user manual for instructions on how to do this. The RIP is default setup to use ink channel Pk and Y, if other channels are used then the PlateWriter device setup has to be changed accordingly.

ℹ **Small labels in the ink compartment cover can be moved to indicate which slots currently has Liquid Dot and maintenance Fluid installed.**

- After installing all 5 cartridges, close the ink compartment cover. The printer begins charging and **CHARGING INK** flashes on LCD display. Follow the instructions on the display.

✋ **Stay with the PlateWriter during the charging process. Charging takes about 10 minutes. Never turn off the printer, open the top cover, open the ink cartridges cover or remove the maintenance tank while the CHARGING INK is flashing on LCD display, or you may damage the printer.**

When **PAPER OUT, LOAD PAPER** flashes on the LCD display, charging is complete. Press the ◀ button repeatedly until ◨ appears on LCD display instead of a roll.

✋ **Always turn off the printer using the ⏻ power button. Then wait until the LCD display turns off. This ensures that the print head is safely capped.**

Printer adjustment and set up

The following items needs to be checked and adjusted during the installation of the PlateWriter.

- Disabling of auto nozzle check
- Initial adjustment of print bed/print plane
- Print head initial height and print head protection adjustment
- Print head slant (CR)/bias adjustment

- Resetting bidirectional setting in printer
- Fine adjustment of print head height and tilt

- Front registration system adjustment
- Side registration system adjustment

- Adjustment of the printer feed
- Bidirectional fine tuning

Disabling of auto nozzle check

If the auto nozzle check is enabled, then the printer will try to detect if all nozzles are working. Because the Liquid Dot ink is not consistently detected, then repeated cleans will be performed and eventually result in an error message from the printer.
The auto nozzle check should be switched off in the printer by selecting:
PRINTER SETUP -> AUTO NOZZLE CHECK -> OFF.

Initial adjustment of print bed/print plane

General

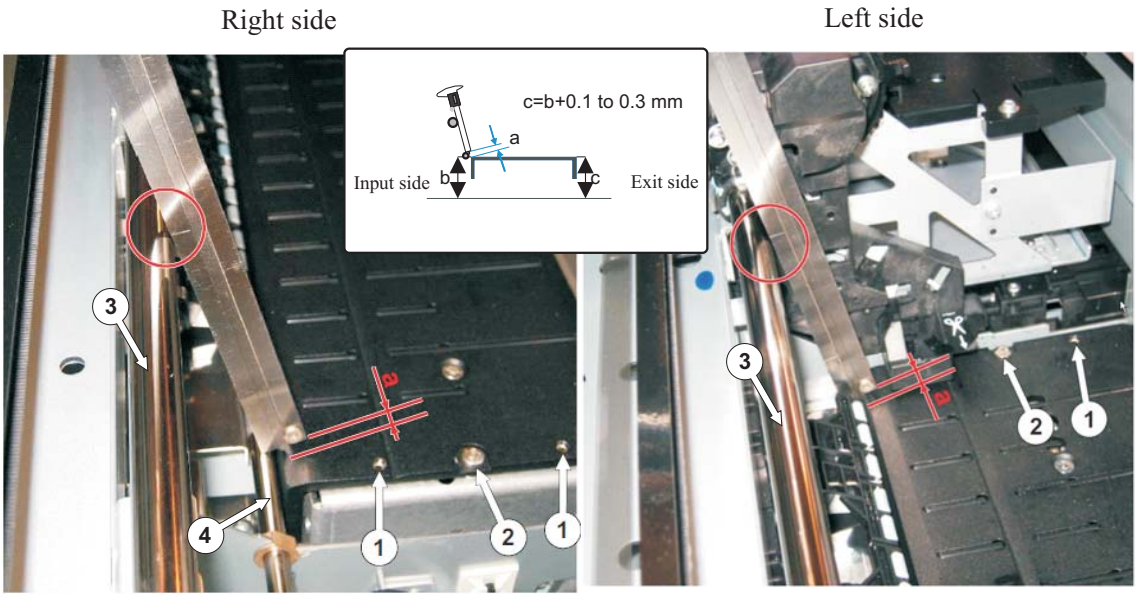
The print bed has been setup from the factory and does not normally require any adjustment. The print bed must be adjusted if it has been removed and reinstalled. It is however recommended to do a basic verification on the adjustment during installation.

The print bed is adjusted in each of the four corners by means of the pointed screws **(1)**. The print bed is secured by the two retaining screws **(2)**.

The height of the print bed in the input side is measured against the feed roller shaft **(4)**. The height of the print bed in the exit side is measured as the difference between the height of the print bed at the input side compared to the output side.

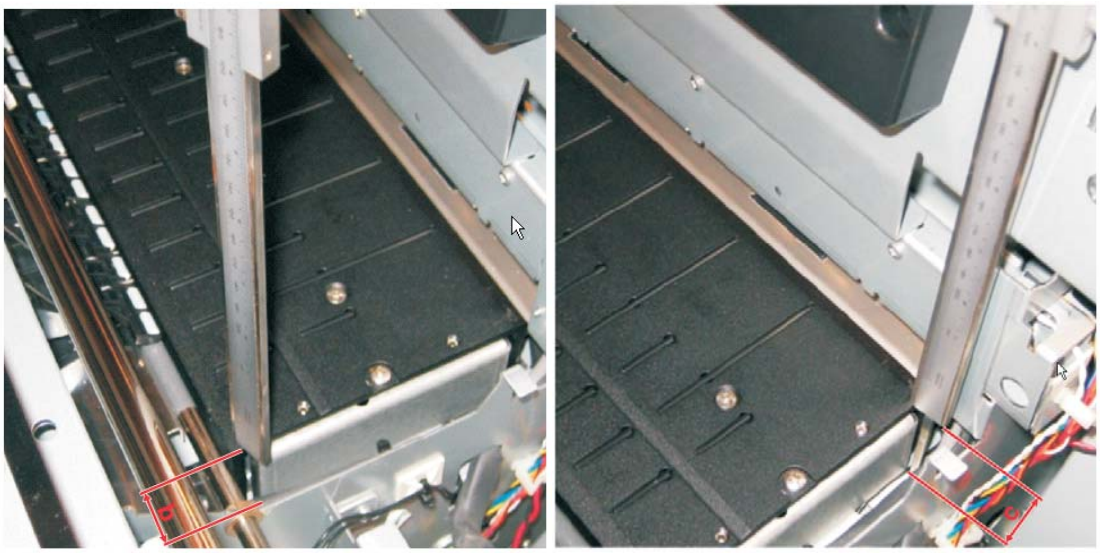
Measuring input side height

The height is measured on the input side as shown in the picture. Note that the backside of the caliper is resting against the print head carriage shaft **(3)**.



Measuring exit side height

The exit side height is measured from the print bed to the underlying support as shown in the picture.



input side exit side

Adjustment procedure

- Adjust one side at a time, left side or right side.
- Loosen the retaining screw **(2)**.
- Adjust the two pointed screws **(1)**. Turning clockwise will increase the print bed height.
  Turning counter clockwise will decrease the print bed height. Not that this may not be measurable before the retaining screw is tightened.
- First adjust the input side height relative to the feed roller shaft **(3)**.
- Then adjust the exit side by measuring the distance *b* and *c* and calculating the difference.
- Tighten the retaining screw **(2)**. It is important to tighten gently (app. ½ turn after screw head have contact with print bed), not to deform the print bed.
- Verify the measurements, as they may change slightly when the retaining screw is tightened.
- Repeat the procedure for the other side.

Always verify both sides are correct after the adjustment has been finished.

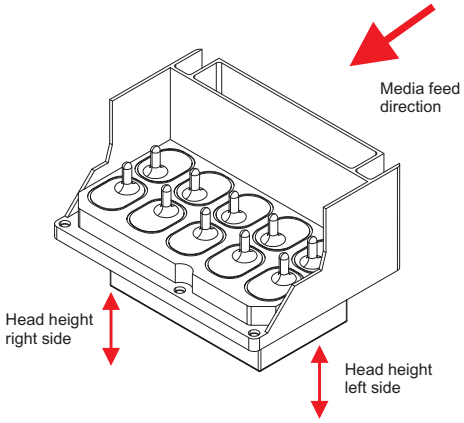
Print head initial height and print head protection adjustment

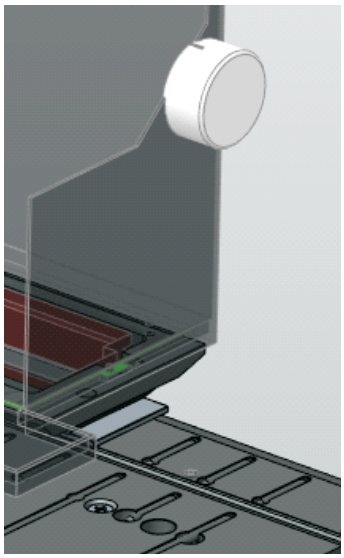
The initial adjustment of the print head height is done to ensure that the print head will not touch the plate during printing.
The print head protection is a physical guard and a sensor that will help prevent that dented or otherwise distorted plates will touch the print head during printing. The guards are protecting the edges of the print head from contact with the plate. The sensor will stop the printing and thus the movement of the print head if it touches the plate during printing.

Carefully examine the plate before printing. It should be flat and without dents. The print head protection will normally protect the head and stop printing before any damage to the head occurs. However, it cannot be guaranteed that all problematic plates will be detected.

Initial print head height adjustment

Start printer in Serviceman Mode by pressing the ⏻ while pressing ▶, ▼, and OK button simultaneously. Hold the three keys pressed until the menu appears in the display.
Uncap the print head by selecting **MENU -> MECHA ADJUSTMENT -> TEMPORARY PG -> [ENTER] UN CAP**.
Open the printer cover and pull the printer carriage out to access to head height camshaft gear as shown below.
Turn the camshaft clockwise by hand and note that the head height changes. Repeat until the highest head height has been reached. Turn the camshaft 1 notch more clockwise. The headheight is now at the 2. highest position.

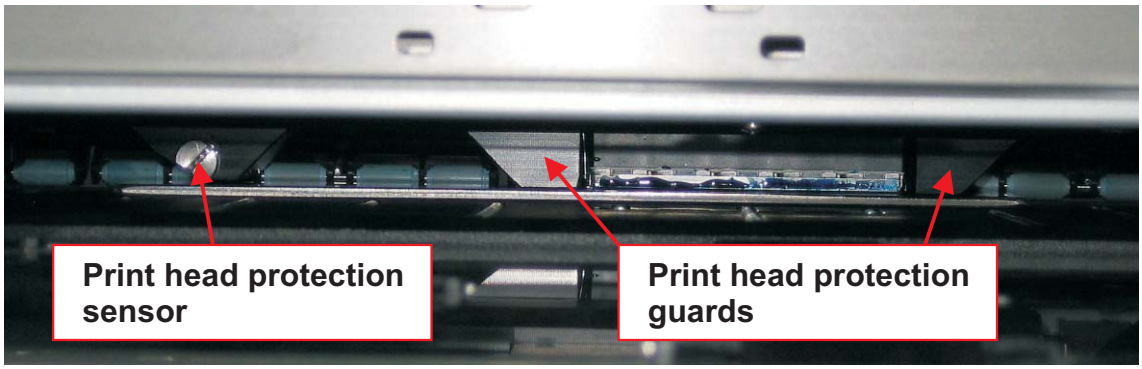




- The height adjustment gear on side of the carriage is adjustable in five levels.
- 1 st. level, WIDEST is as shown on picture when mark on gear is at top. By turning the gear you can see and check this.
  - By turning clockwise from level WIDEST,
  - next level wil be WIDER,
  - next level WIDE,
  - next level STANDARD,
  - next level NARROW, turning one more level will return to WIDEST

Place the adjustment plate on the print plane.

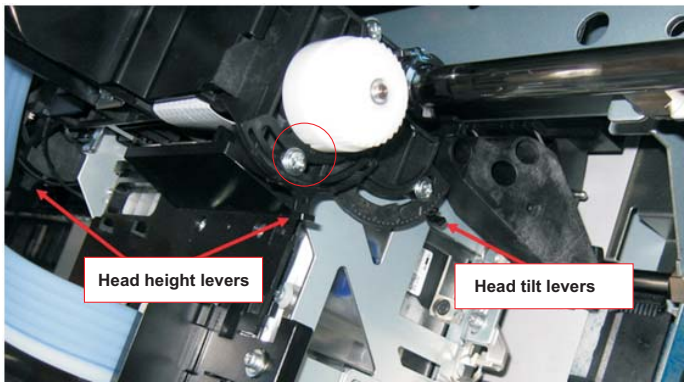
Move the print head carriage carefully so that it passes over the adjustment plate (no. 31) from the tool box as shown. Look in from the exit side of the printer and check that the head can be moved over the plate.



The print head is fragile. Take care not to force the print head over the adjustment plate if the head height is too low. Take care not to push the print head carriage downwards towards the print plane. This can potentially make the print head touch the print plane and damage it.

The head tilt may be set to approximately the center of the scale. The final adjustment of the print head tilt angle will be done later using a print job.

If the head height is not correct loosen the screw for the head height lever cams on each side of the print head carriage. The head height is changed by moving the head height levers up or down. Adjust the print head so that print head protection guards just touch the adjustment plate. The final adjustment of the print head height will be made later using a special print job.

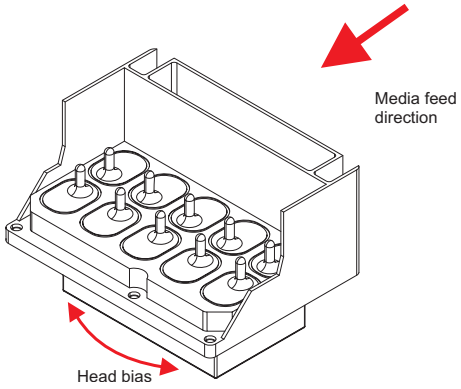


Print head protection adjustment

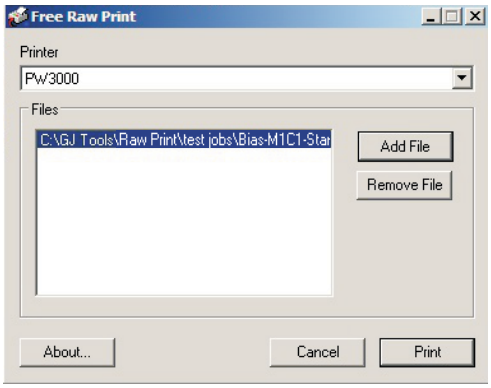
Use a long screwdriver to adjust the print head protection sensor so that it touches the adjustment plate slightly harder than the print head guards (see picture above).

Print head slant (CR)/bias adjustment

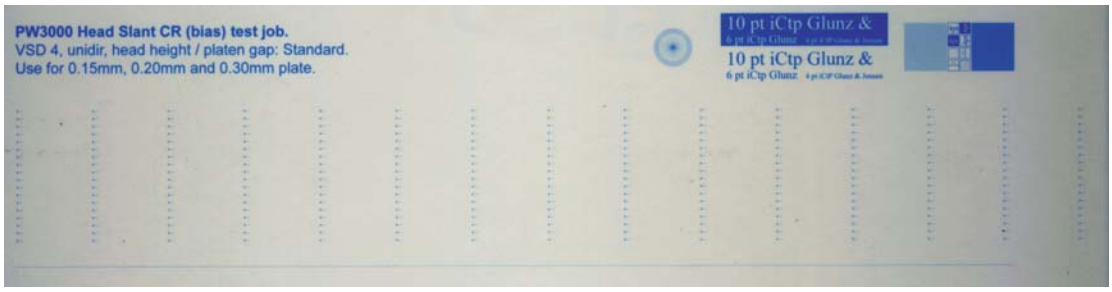
The bias adjustment is for adjusting the print head angle in the CR direction (carriage).

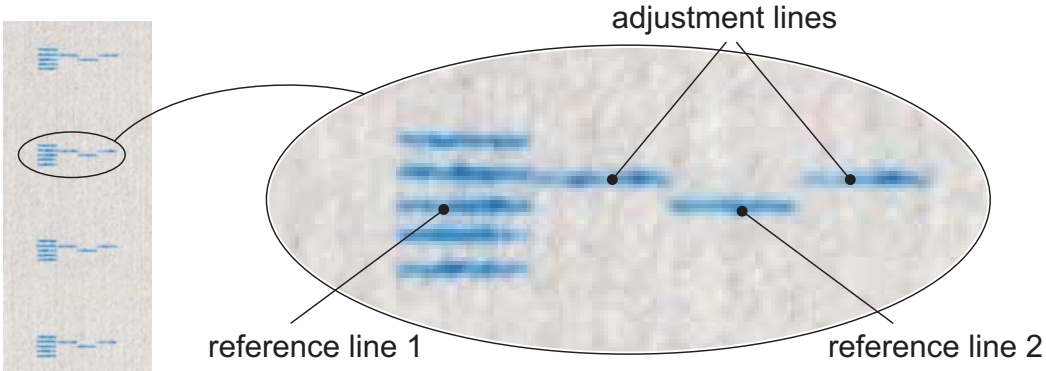


- Load a 0.15, 0.2 or 0.3 mm plate. This adjustment can also be done by using a piece of coated paper.
- Start the program frawprnt.exe located at C:\GJ Tools\Raw Print.
  The head slant/bias is adjusted by printing the file for example *Bias-M1C1-Standard.prn* for the appropriate nozzle row located at C:\GJ Tools\Raw Print\test jobs.

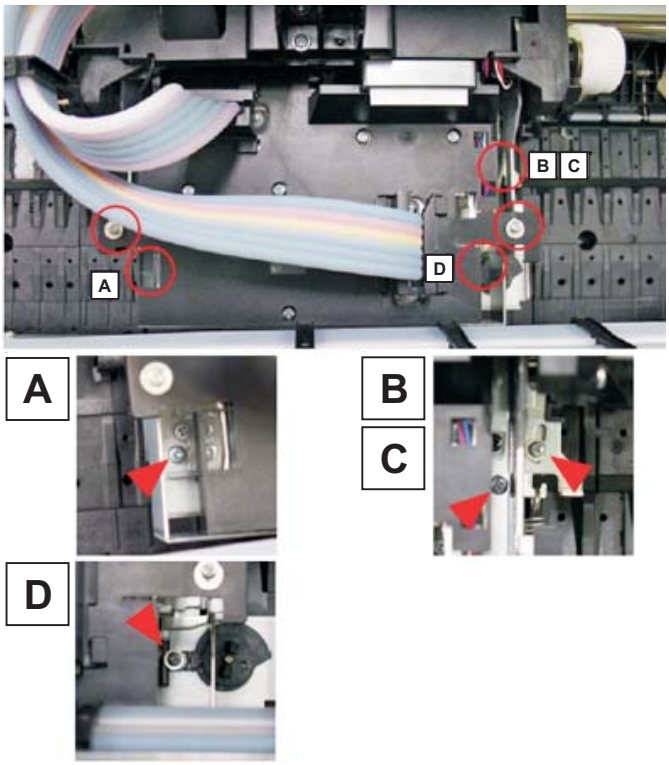


The test job for the head slant (CR)/bias consists of *identical* rows across the page. The test pattern should be aligned when the adjustment is performed correctly. The reference line 1 and 2 and the two adjustment lines should be aligned perfectly when slant is adjusted correctly.

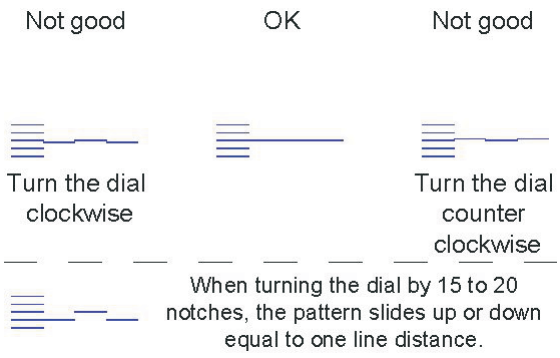

PW3000 Head Slant CR (bias) test job.
VSD 4, unidir, head height / platen gap: Standard.
Use for 0.15mm, 0.20mm and 0.30mm plate.
10 pt iCtp Glunz &
10 pt iCtp Glunz &



- To adjust the head slant (CR)/bias press ▶ in the Serviceman Mode and select **MECHA ADJUSTMENT -> TEMPORARY PG -> [ENTER] UN CAP**. Open the top cover and slide the carriage to the left.
- Loosen the 6 screws shown below.



- Turn the adjustment dial to adjust the slant of the print head.


Not good
OK
Not good
Turn the dial clockwise
Turn the dial counter clockwise
When turning the dial by 15 to 20 notches, the pattern slides up or down equal to one line distance.

If using M1C1 or M2C2 bias the adjustment is 10 clicks off, if using PK1Y1 or PK2Y2 the adjustment is 15-20 clicks off.

- Tighten the 6 screws again and close the top cover.
- Print the adjustment pattern again and check the adjustment result. Repeat the steps above until the adjustment are finished. After finishing the adjustment, press (OK) while **[ENTER] CAP** is displayed to cap the print head. Then, turn the printer off and finish the adjustment.

When the mechanical adjustments have been performed it's advised to do a cleaning from the control panel, as the head has been uncapped for a period.

Resetting bidirectional setting in printer

General

The printer keeps a number of reference settings which are used in the timing of ejecting the droplet when bidirectional printing is performed. The bidirectional settings in the printer are closely related to the distance between the print head and the printing plate. In other words the printer setting and the head height must match to achieve best possible print quality.

The bidirectional settings used for the PlateWriter will be set to a fixed reference value. This means that the match between timing and print head height can be adjusted by changing the actual physical head height.
In this way the absolute print head height can be verified by printing a job in bidirectional print mode. This eliminates the need to use feeler gauges to perform head height adjustment.

The resetting of the bidirectional setting to this fixed value is normally performed from the factory. It needs only to be done, one time for all, for the narrow head height and one time for the standard head height.

The bidirectional settings in the printer can be changed only through an adjustment procedure built into the printer. The procedure uses relative values from 1 to 7 to alter the actual printer settings.
It may be necessary to repeat the procedure more than once if the deviation to the fixed value is larger than one relative change can accommodate.

There are three main steps for checking and resetting the bidirectional setting in the printer:

1. Print an “adjustment variables” status sheet from the printer. The sheet lists the actual absolute bidirectional setting s in the printer.

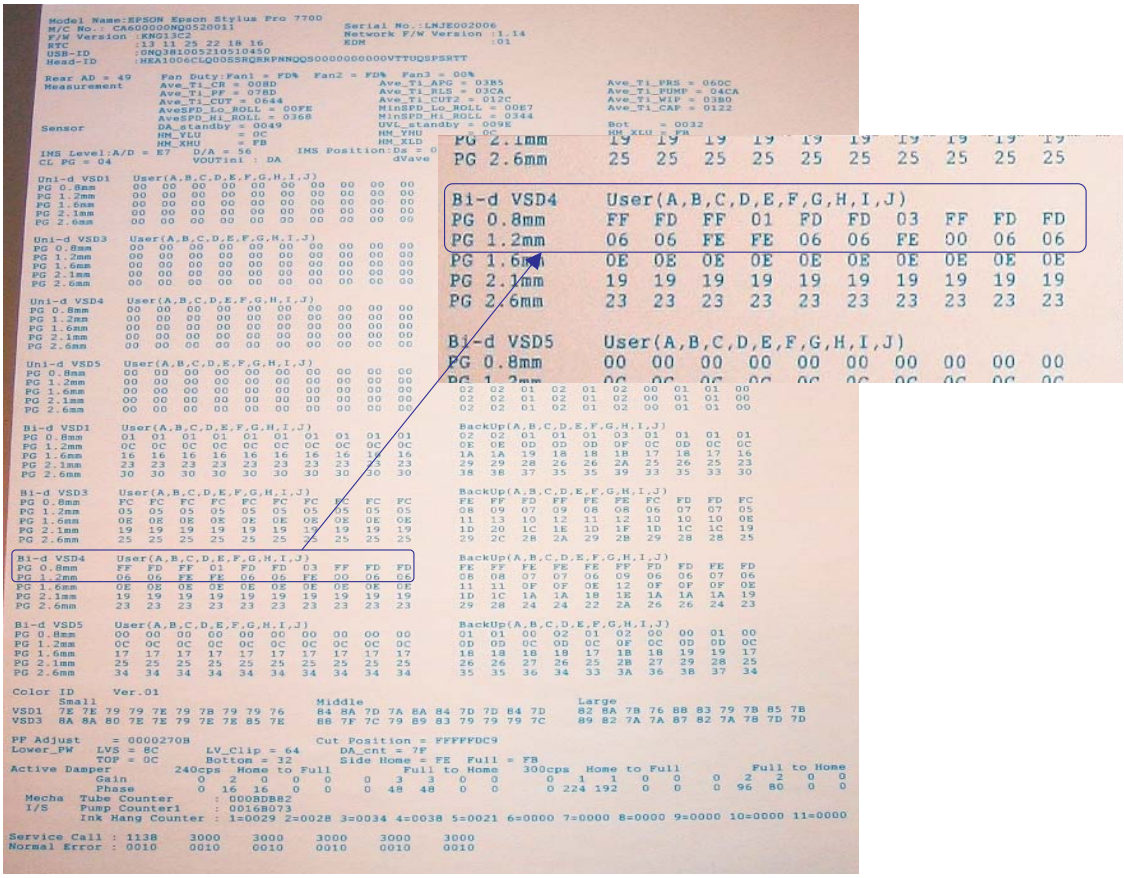
2. Start the utility and key in the values as read from the sheet. The utility will calculate a number of relative ‘adjustment’ values as a result.

3. Change the settings in the printer according to the results from the utility.

Print an “adjustment variables” status sheet from the printer

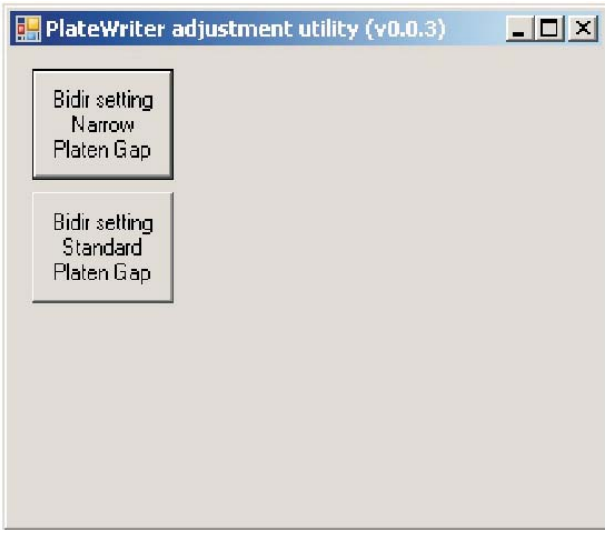
- Start printer in Serviceman Mode by pressing the ⏻ while pressing ▶, ▼, and OK button simultaneously.
- Load a sheet of paper at least the size of A3.
- Print “adj. variables” sheet from Serviceman Mode.
  (**MENU -> MECHA ADJUSTMENT -> PRINT ADJUSTMENT VARIABLE**).
- Locate the section named Bi-d VSD4 (see picture below). The section contains numbers in hex notation, each representing a bidir setting for a specific nozzlerow. It is not necessary to understand how hex numbers works, just use the alphanumeric as if they were two letter words.

  The 10 values in the PG 0.8 mm row correspond to the narrow head height.
  The 10 values in the PG 1.2 mm row correspond to the standard head height.



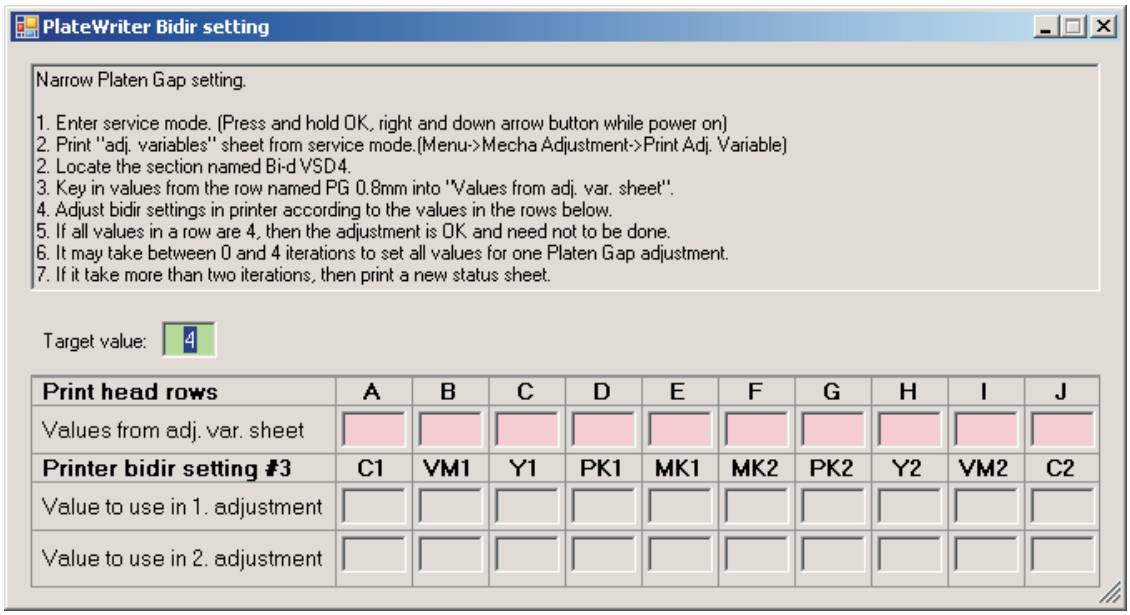
Bidirectional setting utility

Start the PW Bidir setting utility program from "C:\GJ Tools\PW 2500 3000 8000 XL adjustment utility\EpAdj.exe".



The resetting has to done for both narrow and standard platen gap (head height). The procedures are much the same but they have to be performed individually. Start with the narrow platen gap.

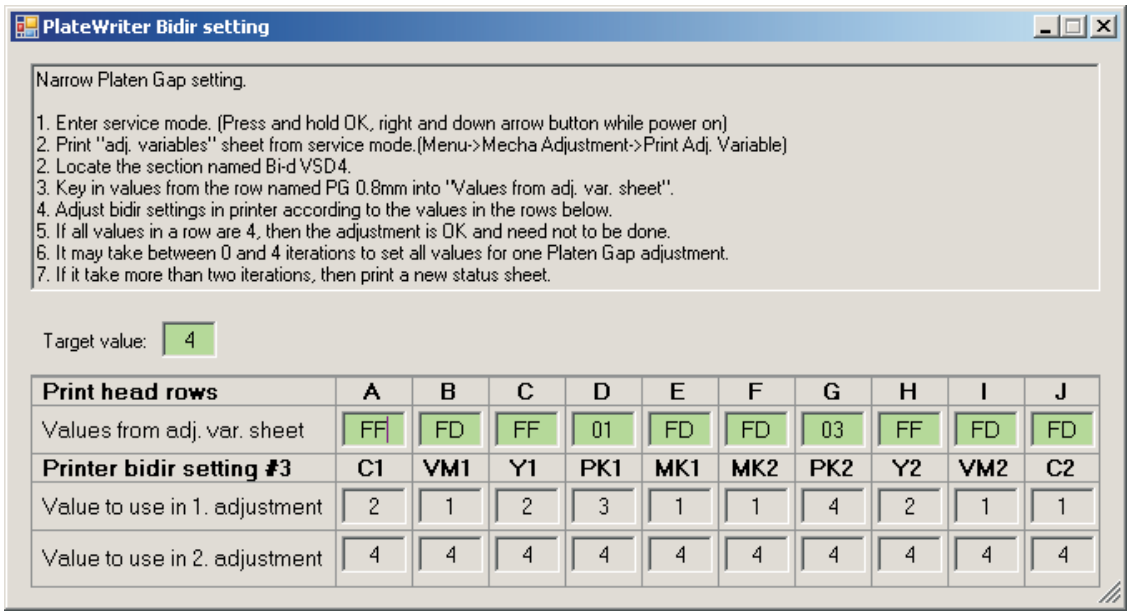
Verifying and changing the bidirectional settings for the narrow platen gap


PlateWriter Bidir setting
Narrow Platen Gap setting.
1. Enter service mode. (Press and hold OK, right and down arrow button while power on)
2. Print "adj. variables" sheet from service mode.(Menu->Mecha Adjustment->Print Adj. Variable)
2. Locate the section named Bi-d VSD4.
3. Key in values from the row named PG 0.8mm into "Values from adj. var. sheet".
4. Adjust bidir settings in printer according to the values in the rows below.
5. If all values in a row are 4, then the adjustment is OK and need not to be done.
6. It may take between 0 and 4 iterations to set all values for one Platen Gap adjustment.
7. If it take more than two iterations, then print a new status sheet.
Target value: 4

Print head rows	A	B	C	D	E	F	G	H	I	J
Values from adj. var. sheet										
Printer bidir setting #3	C1	VM1	Y1	PK1	MK1	MK2	PK2	Y2	VM2	C2
Value to use in 1. adjustment										
Value to use in 2. adjustment										

The target value is the reference value and should normally not be changed!

Key in the 10 alphanumeric values as they are read from the adj. var. sheet.


PlateWriter Bidir setting
Narrow Platen Gap setting.
1. Enter service mode. (Press and hold OK, right and down arrow button while power on)
2. Print "adj. variables" sheet from service mode.(Menu->Mecha Adjustment->Print Adj. Variable)
2. Locate the section named Bi-d VSD4.
3. Key in values from the row named PG 0.8mm into "Values from adj. var. sheet".
4. Adjust bidir settings in printer according to the values in the rows below.
5. If all values in a row are 4, then the adjustment is OK and need not to be done.
6. It may take between 0 and 4 iterations to set all values for one Platen Gap adjustment.
7. If it take more than two iterations, then print a new status sheet.
Target value: 4

Print head rows	A	B	C	D	E	F	G	H	I	J
Values from adj. var. sheet	FF	FD	FF	01	FD	FD	03	FF	FD	FD
Printer bidir setting #3	**C1**	**VM1**	**Y1**	**PK1**	**MK1**	**MK2**	**PK2**	**Y2**	**VM2**	**C2**
Value to use in 1. adjustment	2	1	2	3	1	1	4	2	1	1
Value to use in 2. adjustment	4	4	4	4	4	4	4	4	4	4

Note the two last rows at the bottom of the utility called "Value to use in 1. adjustment" and "Value to use in 2. adjustment". These are the resulting values which are used to change the printer bidirectional settings. Disregard the "Value to use in 2. adjustment" row for now.

If all of the values in the **"Value to use in 1. adjustment" is 4**, then the bidirectional setting for the narrow platen gap is OK. Skip the rest of this procedure and proceed with checking the standard platen gap.

If any of the values in the **"Value to use in 1. adjustment" differ from 4**, then the bidirectional setting for the narrow platen gap has to be changed.

Changing the bidirectional settings in the printer

1. Power the printer on (User Mode).

2. Set platen gap (head height) to narrow,
   MENU -> PRINTER SETUP -> PLATEN GAP -> NARROW.

Remember to set the platen gap (head height) back after adjustment has been finished, or power printer off which will also reset platen gap (head height) to standard.

3. Select **MENU -> HEAD ALIGNMENT -> PAPER THICKNESS ->
   SELECT THICKNESS -> 8 mil. (0.2 MM).**

4. Select **MENU -> HEAD ALIGNMENT -> ALIGNMENT -> MANUAL ->
   BI-D ALL -> PRINT.**

5. Load a sheet of paper at least the size of A4, portrait direction, into the printer. (The printed sheet will not be used but is printed to gain access to the bidirectional settings menu in the printer.)

6. If the loaded paper sheet is smaller than 407 mm, then the print will be split up. When the first page finishes return to main menu using ◄ key, then release the page and load the second sheet.

7. When the pattern job finishes, the sheet will be released automatically and the bidir setting menu is displayed in the printer display.

8. Tap the **OK** key, until reaching #3 C1.

Be careful not to tap too far, as it is not possible to tap backwards, you have to start all over again.

9. Change the values for each of the 10 rows of #3 according to the listing in the PW Bidir setting utility **"Value to use in 1. Adjustment"** by using ▼and ▲ key.

10. When #4 C1 is reached just use the **OK** button to tap past these 10 last settings.

Now refer to the last row at the bottom of the utility called **"Value to use in 2. adjustment"**.

If all of the values in the **"Value to use in 2. adjustment" is 4**, then the bidirectional setting for the narrow platen gap is OK. Skip the rest of this procedure and proceed with checking the standard platen gap.

If any of the values in the **"Value to use in 2. adjustment" differ from 4**, then the bidirectional setting for the narrow platen gap must be further changed. Repeat the above procedure from item 5.

Verifying and changing the bidirectional settings for the standard platen gap

The procedure for the standard platen gap (head height) is almost identical to the procedure for the narrow platen gap. The exceptions are:

1. Use the utility for the standard platen gap.

2. Set platen gap to standard, **MENU -> PRINTER SETUP -> PLATEN GAP -> STANDARD**.

3. Select **MENU -> HEAD ALIGNMENT -> PAPER THICKNESS -> SELECT THICKNESS -> 12 mil. (0.3 MM)**.

Final verification for the bidirectional settings

If any changes have been made to the bidirectional settings for the narrow or standard platen gap (head height), then perform the following final verification:

1. Print the "adj. variables" status sheet as previously explained, from Serviceman Mode.

2. Key in the values for narrow platen gap (0.8 mm) in the utility and verify that all values in the two lowest rows are 4. If not perform the procedure "Verifying and changing the bidirectional settings for the narrow platen gap" again.

3. Key in the values for standard platen gap (1.2 mm) in the utility and verify that all values in the two lowest rows are 4. If not perform the procedure "Verifying and changing the bidirectional settings for the standard platen gap" again.

Fine adjustment of print head height and tilt

Make sure the print plane and print head height is adjusted as previously described.
If there, at any time during this adjustment, is any doubt about print head height becoming too low, use the adjustment plate to verify the height again.

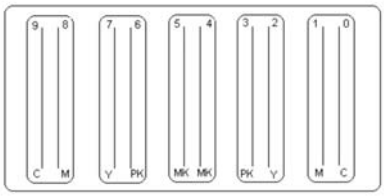
The PlateWriter can be used with three different plate gauges: 0.15 mm, 0.20 mm and 0.30 mm. The printer moves the print head up or down prior to printing according to the print head height setting in the job.
The head height can be either narrow or standard. Standard head height is approx. 0.4 mm higher than narrow.
The head height is set in the RIP PlateWriter device configuration. (See device configuration in the Operating Manual).

The head height (and head angles, tilt and bias) can be adjusted mechanically. It is important to understand that this adjustment will be common for both narrow and standard head heights.

The print head height and head angles are adjusted by printing a special job. The printed patterns are visually inspected and the mechanical adjustment done accordingly.
The adjustment is done for one plate gauge only. The adjustment should be made using the thickest plate gauge available. E. g. if both 0.15 and 0.30 mm plate is to be used, then adjustment should be made using the 0.30 mm plate.
For 0.15 mm plate gauge use and adjust the narrow head height.
For 0.20 and 0.30 mm plate gauge use and adjust the standard head height.

There are six print jobs available ("C:\GJ Tools\Raw Print\test jobs\bidir") - only one job is used for the adjustment:

- HeadHeigth-C1C2-Standard.prn
- HeadHeigth-C1C2-Narrow.prn
- HeadHeigth-M1M2-Standard.prn
- HeadHeigth-M1M2-Narrow.prn
- HeadHeigth-Y1Y2-Standard.prn
- HeadHeigth-Y1Y2-Narrow.prn

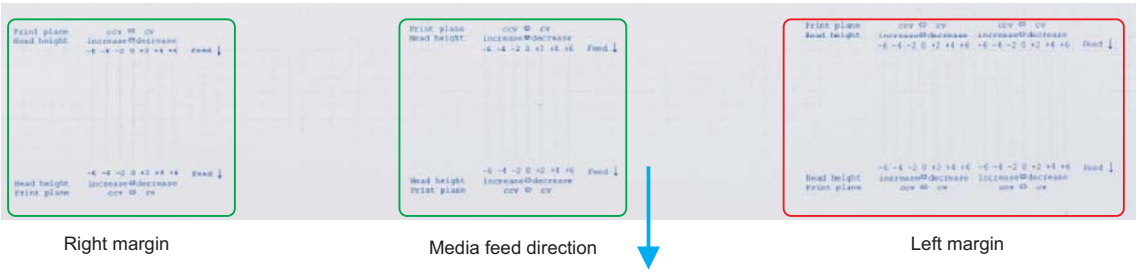


The jobs will print using the narrow or standard head height and they will use different nozzle rows. It is recommended to use the outermost located nozzle rows available. The listing is ordered having the jobs printing on the outermost rows first.

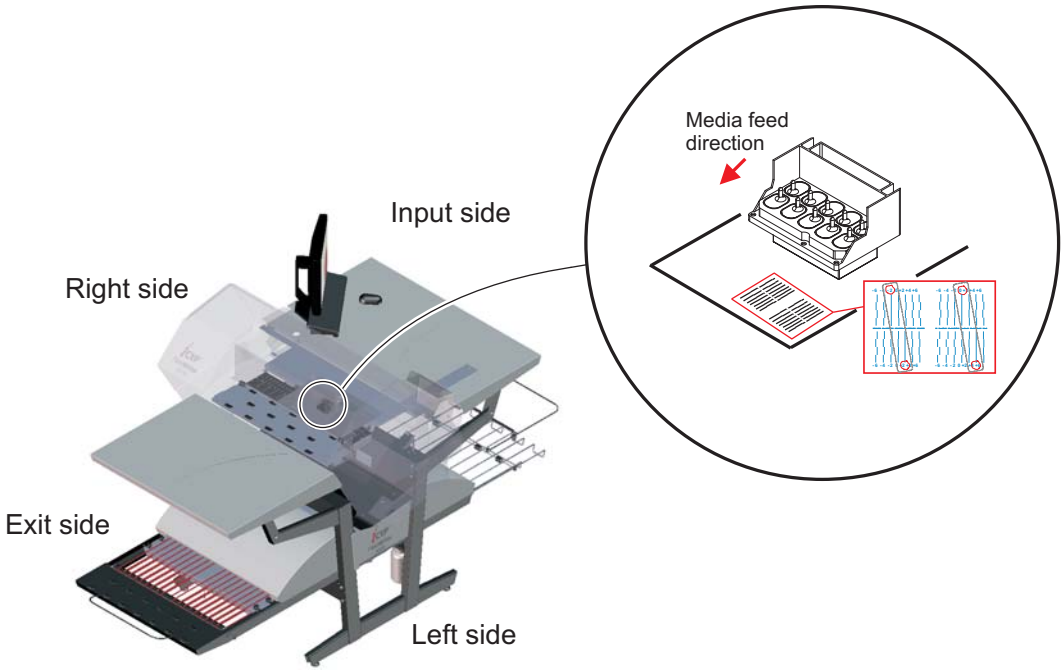
Take care not to push the print head carriage downwards towards the print plane when adjusting. This can potentially make the print head touch the print plane and damage it.

Head height and tilt adjustment

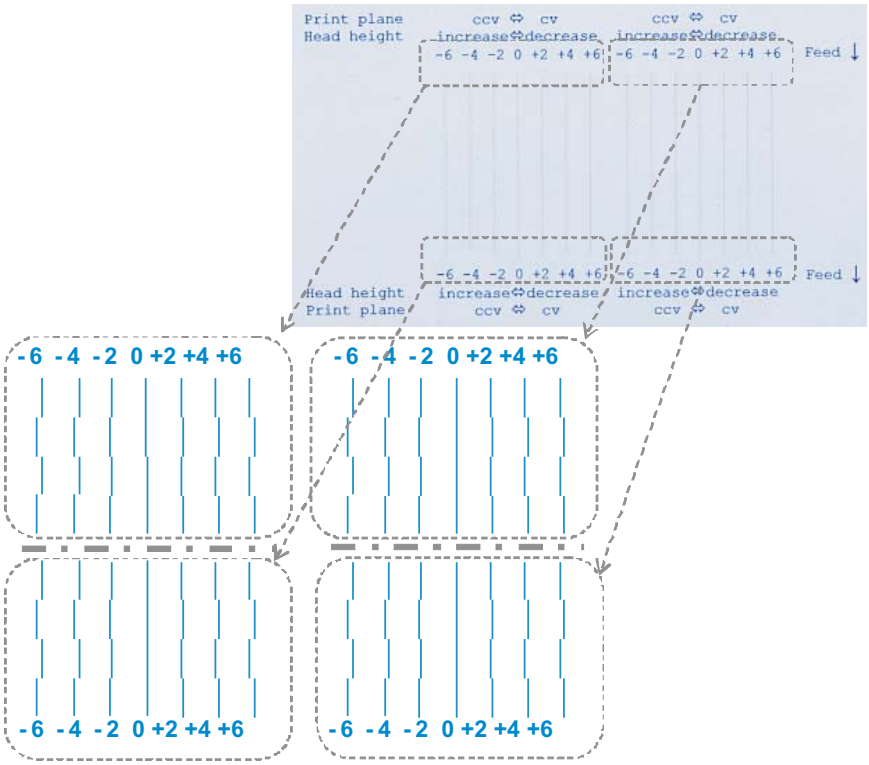
The job prints a number of identical blocks of patterns. Each pattern block indicates the head height at the specific position. The **double blocks** (red frame) at the left margin is used to adjust the head height in left and right side of head as well as head tilt.
The **repeated blocks** (green frames) across the printing media is used to indicate the adjustment height of the printing plane.



The print head has four corners. The height of these four corners is represented in the double adjustment pattern block as shown below.
Each corner of the double pattern block represents the corresponding corner of the printhead as imagined directly above the printed image.

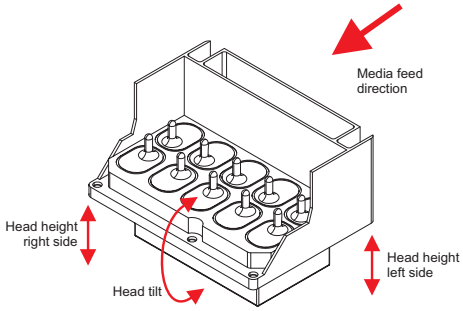


The center part of each of the vertical lines can be disregarded, only examine the outermost parts, as marked by the gray rectangles.



It is partly an iterative process to adjust the head height left and right and the tilt, as one adjustment may influence the others. It is recommended to use the following sequence:

- First adjust the tilt.
- Then adjust the head height from for left and right side so that they match.



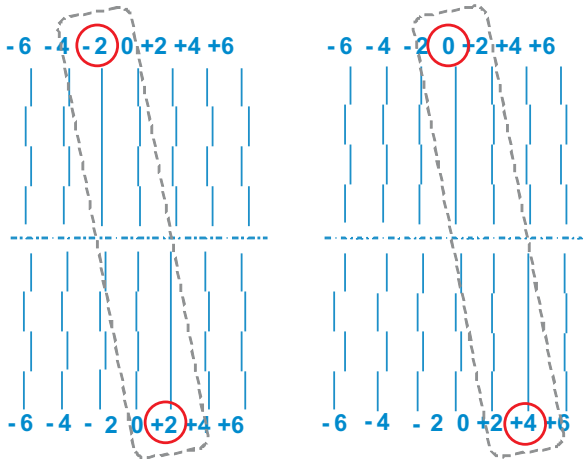
If print rows Y1 and Y2 are used (close to the center of the head) the pattern blocks will not be as sensitive as for the outermost rows. Take care not to misadjust the releative head height between the left and right side. The head height adjustment levers in each side normally are less than 10 clicks apart.

- Finally adjust the head height. The head height levers in both sides should be moved an identical amount because the relative height left and right is already correct.

If just one of the four corners does not have a straight line, then the head height may be too low and touch the plate when printing. Use the adjustment jig to verify and possibly adjust the head height again.

Tilt adjustment

Examine the outermost lines and find the most straight line in each corner. Mark the number in each corner. Remember to disregard the centerpart of the lines, only examine the outermost parts, closest to the printed numbers.

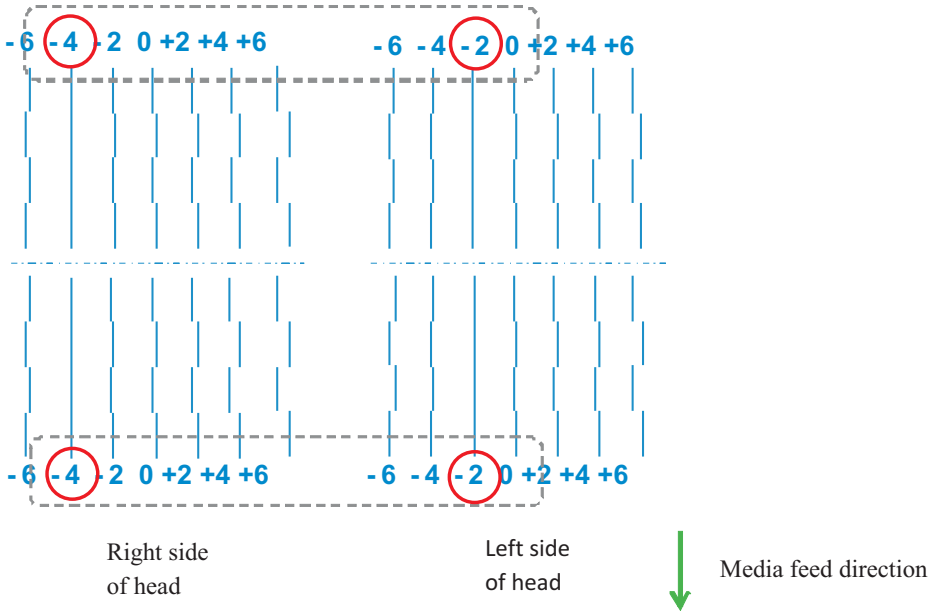


The tilt can be seen as the difference between the upper number and the lower number. Both sides can be used for this.
In this case the front (exit) side of the head is +4 higher than the rear side. This can be seen in both sides of the head, the right side: -2 to +2 = +4, the left side 0 to +4 = +4.
If the head is too high at the front adjust the head tilt lever downwards.
If the head is low at the front adjust the head tilt lever upwards.

The general head height will be affected when the tilt is adjusted. This is because the head is hinged at the back (input) side.

When the tilt is correct the numbers marked at the top should be identical to the numbers marked at the bottom (but not necessarily from left to right).

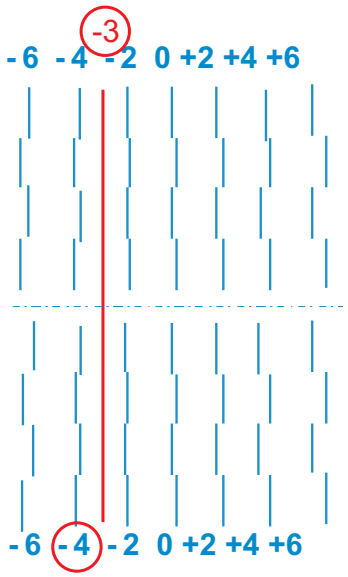
Head height for left and right side adjustment



The relative head height from left to right side can be seen as the difference between the left number and the right number. In this case the right side is lower than the left side. The right side should be increased by 4 to reach the and the left side height should be increased by 2.

Head height

If all 4 corners show identical figures then adjust by moving the height levers in both sides the same amount.



The correct setting may be between two lines. If this is the case use the figure in between as shown. Mark the correct position with the number between the two adjacent numbers.

Each pattern block has 7 vertical lines. The line which is most straight indicates the head height. The head height should be adjusted so that the line denoted 0 is most straight in both ends.

Adjustment of print head height and tilt

- Turn the printer on in Serviceman Mode.
- Open frawprnt.exe located at C:\GJ Tools\Raw Print.
- Load a plate.
- Print the relevant test file.
- Eject the job.
- Uncap the printhead by selecting **MENU -> MECHA ADJUSTMENT -> TEMPORARY PG -> [ENTER] UN CAP**.
- Adjust the head height both sides and the head slant according to the printed pattern at the left margin.
- Repeat from item 3 until the test pattern is OK.

Adjustment of print plane

- Turn the printer on in Serviceman Mode.
- Open Rawprint
- Load a plate.
- Print the relevant test file.
- Eject the job.
- Adjust the print plane right side according to the repeated patterns across the media. Repeat from item 3 until the test pattern is OK.

It is partly an iterative process to adjust the head height left and right and the tilt, as one adjustment may influence the others. It is recommended to use the following sequence:

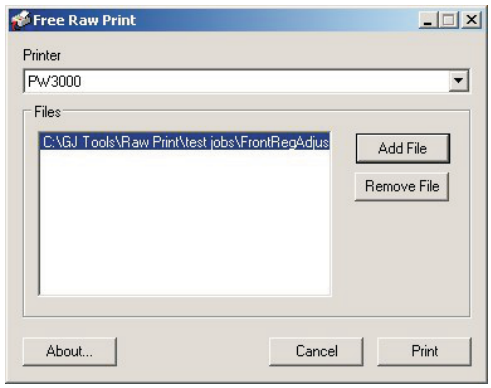
- First adjust the tilt.
- Then adjust the relative head height from for left and right side so that they match.

If print rows Y1 and Y2 are used (close to the center of the head) the pattern blocks will not be as sensitive as for the outermost rows. Take care not to misadjust the releative head height between the left and right side. The head height adjustment levers in each side normally are leass than 10 clicks apart.

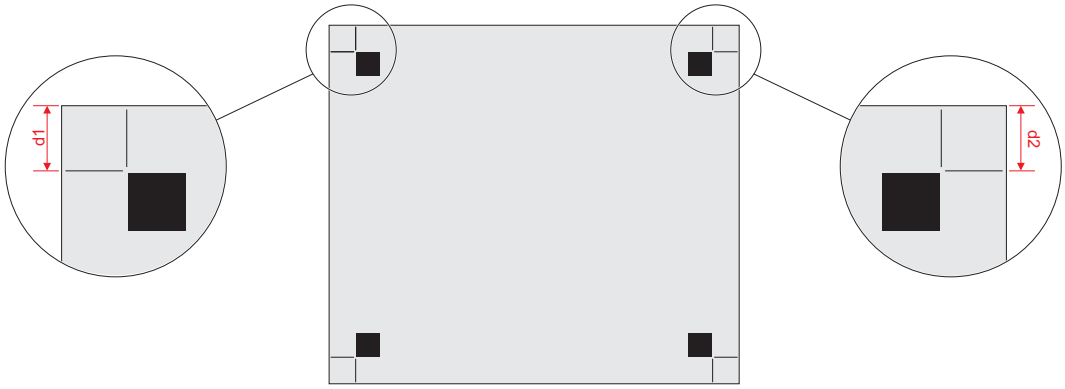
- Finally adjust the head height. The head height levers in both sides should be moved an identical amount because the relative height left and right is already correct.

Front registration system adjustment

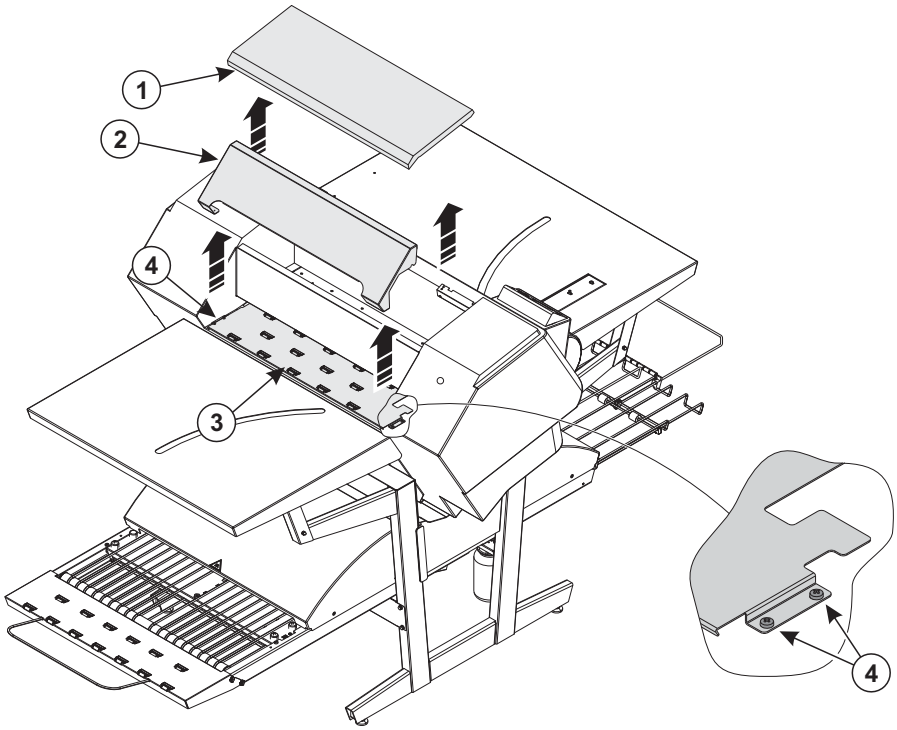
- Load a 0.15, 0.2 or 0.3 mm plate, depending on the selected adjustment scenario. Smaller formats should be loaded in landscape so that the front register pins are used.
- Start the program frawprnt.exe located at C:\GJ Tools\Raw Print. The front register is adjusted by printing the file *FrontRegAdjustment.prn* located at C:\GJ Tools\Raw Print\test jobs.



- When the plate is printed, measure the distances *d1 (left side)* and *d2 (right side)* from the edge of the plate to the marks printed on the plate as shown in the picture.



If *d1* and *d2* are different, then remove the printer top cover **(1)**, exit cover **(2)**, and the printer exit guide **(3)** by unscrewing the four screws **(4)**.



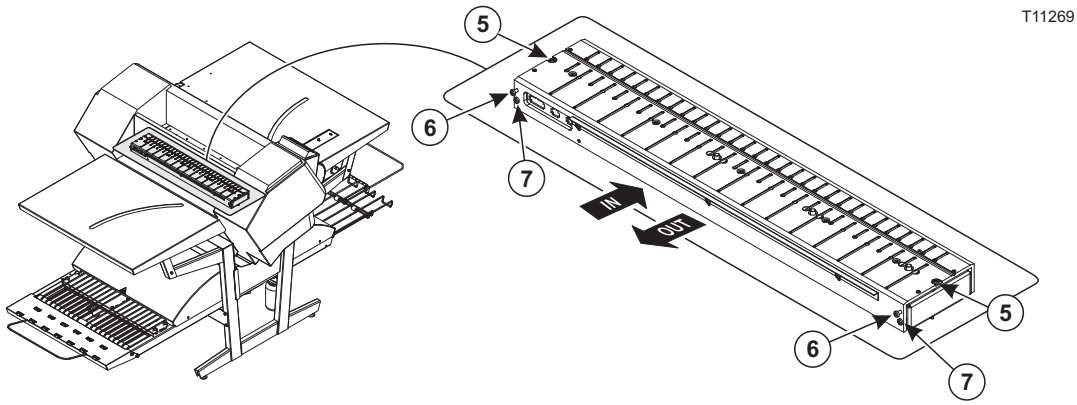
Before adjusting, note the position of the top screws (5) and loosen them gently until it loses the contact with the print bed.

If the print bed needs to go:

- IN - loosen the screw **(6)**, tighten the screw **(7)** (1 turn = 0.7 mm), and tighten the screw **(6)**.
- OUT - loosen the screw **(7)**, tighten the screw **(6)** (1 turn = 0.7 mm), and tighten the screw **(7)**.

After adjustment, gently tighten top screws **(5)** to same position as before adjusting.

It is recommended to tight the top screws (5) gently, approximately ½ turn after screw head has contact with print bed, to avoid deformation of print bed.



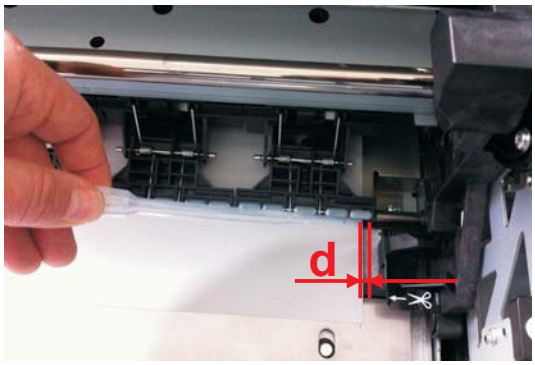
Remount the printer exit guide **(3)** by using the four screws **(4)** and place the printer exit **(2)** and top covers **(1)** back.

Side registration system adjustment

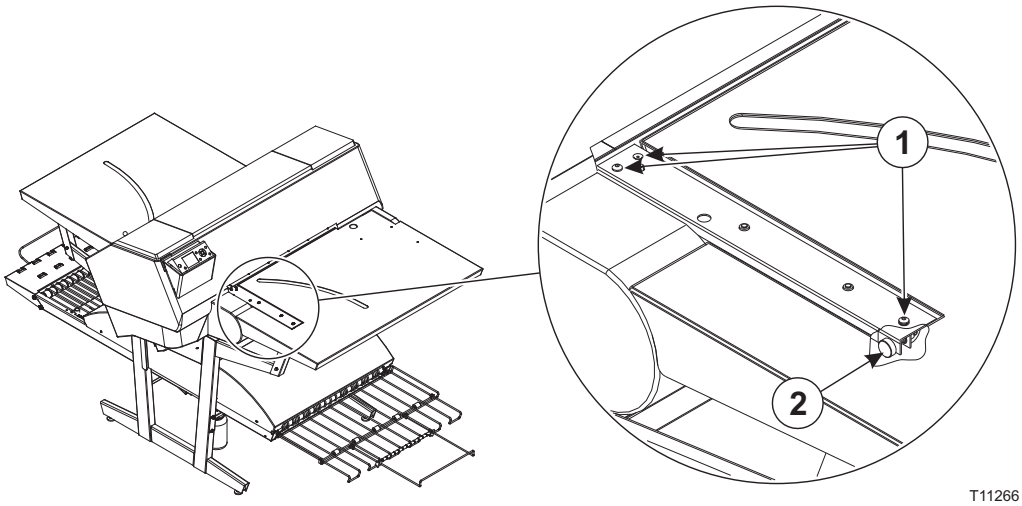
Side registration system is not standard component of PlateWriter 2500.

- Load the plate according to the instruction described in the Part 2 in the Operating Manual using the % button.

- While observing the plate edge in relation to the pinch roller (distance *d*), eject the plate by pressing the ▼ button.

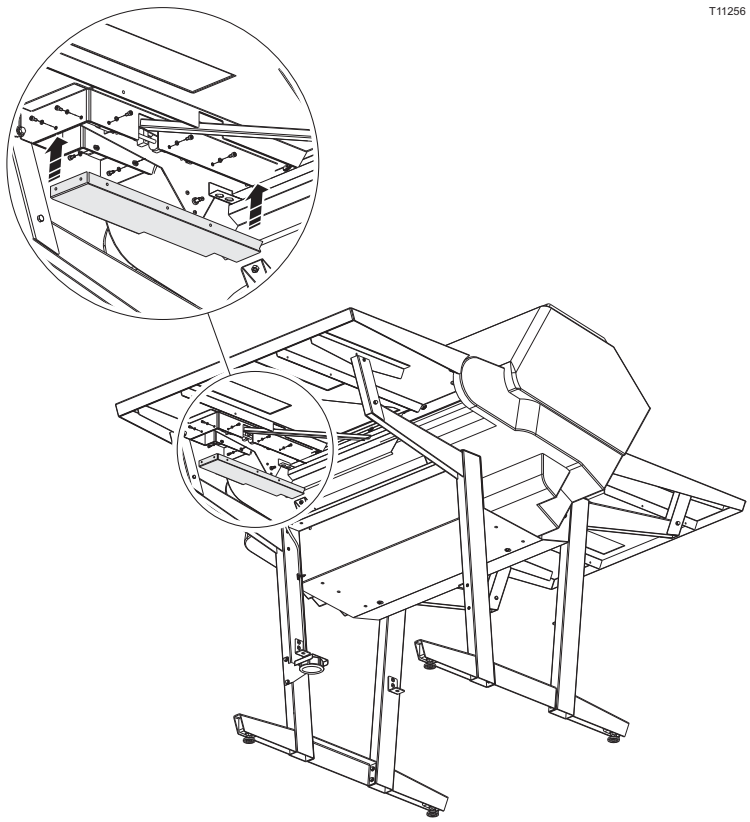


- If distance *d* is not constant, then loosen (do not unscrew completely!) the screws **(1)** locking pin assemble.
- If distance *d* is increasing, then turn the finger screw **(2)** (from bottom side of the input table) clockwise.



- Tighten the screws back again and repeat the adjustment again until distance *d* is constant during the plate eject.

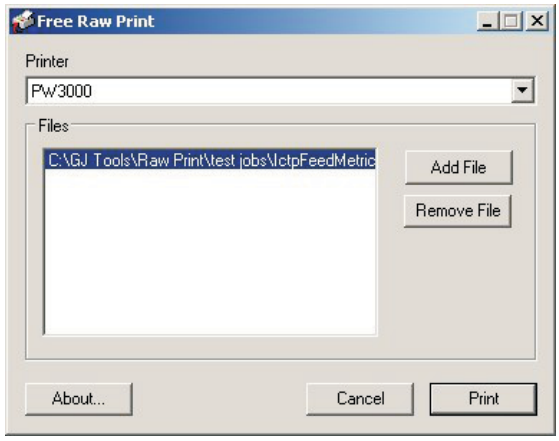
- Mount the side register cover to the input table and secure it with 7 screws and washers (no. 30) from the tool box as shown.



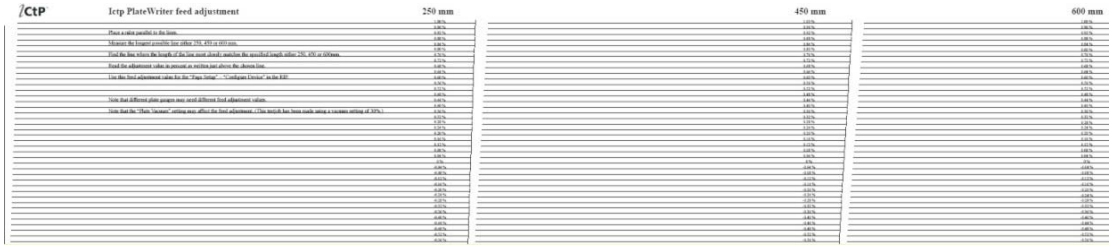
Adjustment of the printer feed

The feed adjustment needs to be done in order to secure the correct image length on the plate. The printer already has a feed adjustment built in but since the correction depends on the plate thickness the correction value must be set in the page setup. This makes it possible to ensure perfect feed for all plate gauges used.

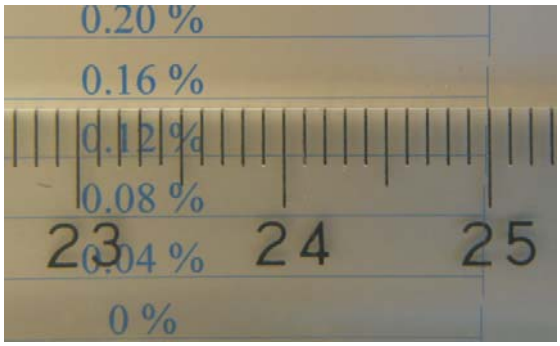
- Load a plate in portrait on the PlateWriter 2500/3000. Note that the feed adjustment has to be done for each plate thickness.
- Start the program frawprnt.exe located at C:\ GJ Tools \Raw Print. The feed is adjusted by printing the file *IctpFeedMetric.prn or IctpFeedInch.prn* located at C:\GJ Tools\Raw Print\test jobs.



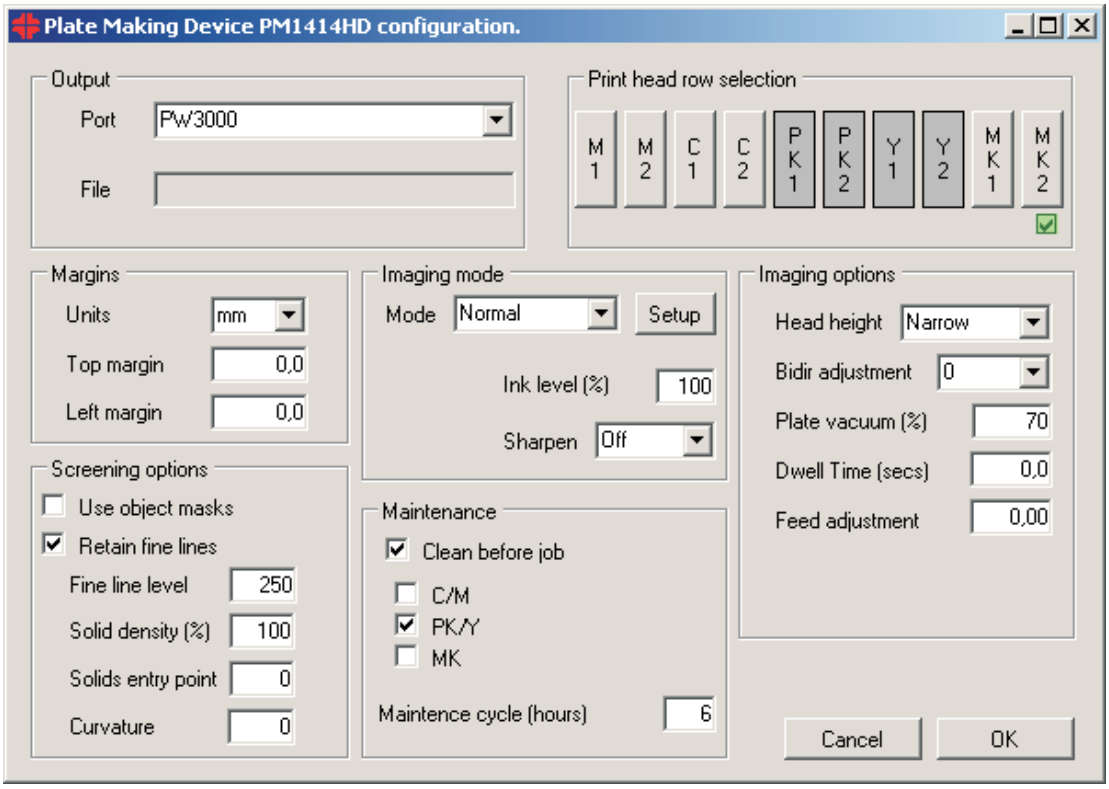
- After the job has been printed place a ruler on the best line of fit.



- Measure the longest possible line 250, 450 or 600 mm and find the deviation factor as shown. In this case the feed needs to be adjusted +0,16% measured at the 25 cm point.



- Open the page setup(s) with plate gauge identical to the one performed for the above test and key in the new value in the **Feed adjustment** in the "Configure Device".



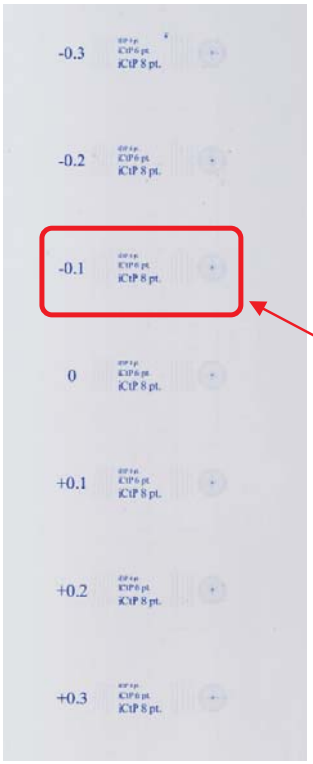
The feed on different plate thicknesses might be different so if other plate thicknesses are used you must run the same test again using the corresponding plate. If the value turns out to be different you can key in the value in the relevant page setup(s).

We recommend that the feed is checked regularly depending on the system usage.

Bidirectional fine tuning

The timing of the bidirectional print may be fine-tuned by setting the bidirectional adjustment value in the device configuration dialog.

The setting is found by using frawprnt.exe (located at "C:\ GJ Tools \Raw Print") to print the bidirectional adjustment job from the GJ tools folder. The job is in the "C:\GJTools\Raw Print\test jobs\bidir" folder. There are files for narrow and standard platen gap as well as for each nozzle row. Only one file needs to be printed for each platen gap.



The job consists of 7 rows. Each row has a pattern block which is repeated across the plate (only the outermost left is shown in the picture).

The test pattern is repeated across the plate, you may want to inspect patterns across the plate to find the best average line.

Inspect each of the 7 rows and determined which is best. Use the corresponding setting for the bidirectional adjustment.

If the pattern blocks in a single row differ in quality across the plate, the print plane may need adjustment.

Firmware update

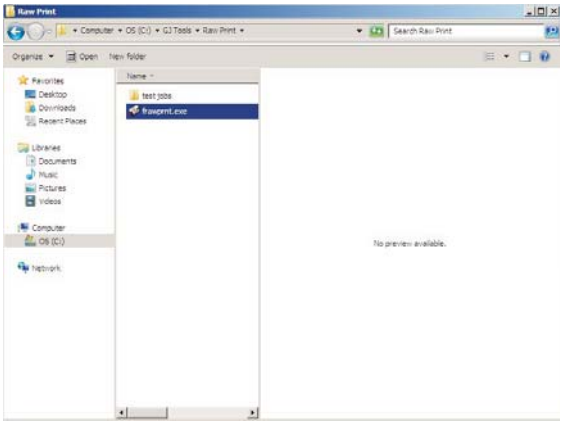
Installation of firmware should only be performed by qualified service personnel.

Always make sure that you have the correct version of the Firmware (FW) before attempting to update.

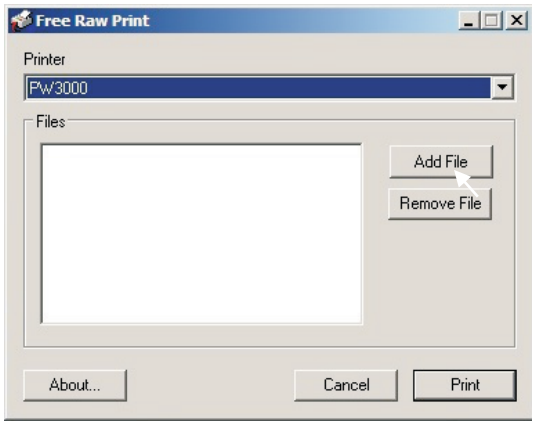
Procedure

- Check that the printer does not already have the new FW version. This can be done by selecting Menu->Printer Status->Version.
- It will show e.g. KND24C4, 1.12.5000. KND24C4 denotes the FW version.
- **Press and hold all four arrow buttons** and turn the unit on, by clicking the power button.
- The display will show UPDATE FIRMWARE.

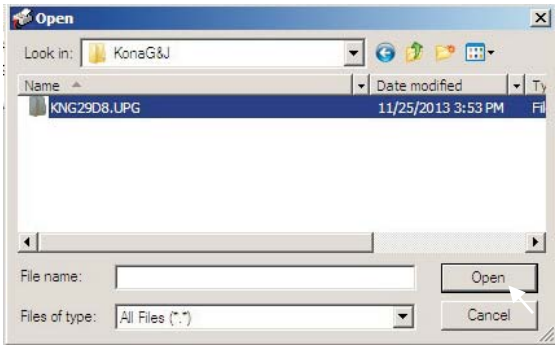
- Open the RawPrint from the GJ tools folder.



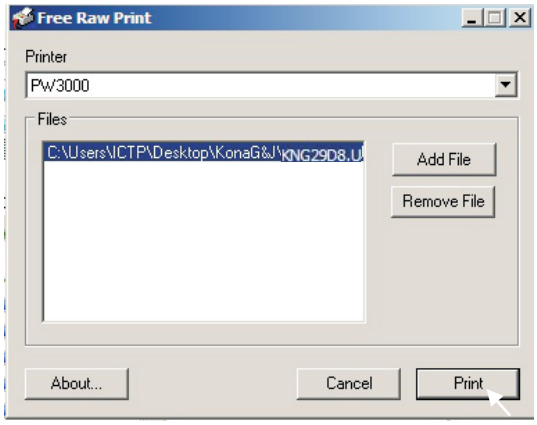
- Select the printer you want to update and click **Add File**.



- Select files of type: "All files (*.*)", locate FW file and click Open.



- Click Print button.



- It may take minute or two to send the file to the printer. The progress may be viewed by opening the printer from windows control panel.
  (Eg. Start->Settings->Printers->PW3000.)
- When the complete file has been received by the printer the display will show: "UPDATING FIRMARE" |**.....*|.
  The increasing number of asterisk's will show the progress. It may take the several minutes to finish the update.

- The printer will reboot automatically after the update has finished.
- Check that the FW version in the printer is updated as expected, by selecting Menu->Printer Status->Version.

Installation is now complete.

Part 3: The Finisher

General

The Finisher is designed to cure and dry the Liquid Dot (LD) that is jetted onto the iPlate by the imagine unit. It also applies iFinisher to cover and protect the iPlate. The heating of the plate together with iFinisher application will ensure a clean background of the iPlate when set on press.

When the iPlate is placed over the optic sensor in the front belts the belts will start to move the plates into the oven. When the oven sensor is activated by the iPlate the speed of the belt and temperature of the oven is regulated to get the correct temperature on the plate.

The iFinisher pump will start recycling so that iFinisher is applied to the rubber rollers via the PUR application roller.
The Finisher is also controlling the ink dryer inside/on top of the imaging unit. Plate registration is also controlled from the Finisher if applicable.

Connection the FU to the RIP PC

Windows XP:

The electronics controlling the Finisher can be accessed, tested and setup by the use of the Windows HyperTerminal. Connect the USB cable from the bottom of the unit to the RIP computer. Run the HyperTerminal which can be located under the Windows.
Start under: All Programs>Accessories>Communications>HyperTerminal
See the SW upgrade for HyperTerminal settings.

Windows 7:

Run the PTTY SW and select appropriate comport.

Parameters setting

Default parameters setting for PlateWriter 3000

The defaukt settings are NOT recommended settings, but the default values when Finisher Unit Firmware is installed.
See the recommended values for PlateWriter 3000 on page 3-4.

Parameter	Description	Min.	Max.	Default	Unit	Explanation
DAO	**D**rier **A**lways **O**n	0	1	0	bool	Activate ink drier permanent.
DFS	**D**rier **F**low **S**etting	20	100	80	%	Duty cycle for the ink drier fan or fan next to the print head.
DHS	**D**rier **H**eat **S**et point	15	50	28	°C	Temperature for ink drier. If IDS=2 this controls the printer plane temperature.
DHB	**D**rier **H**eat **B**eta	-200	200	0	0.1°C	Calibration offset for ink drier temperature sensor (printer plane if IDS=2).
1AL	P**1 AL**pha	-500	500	-38		Alpha value for heat regulation.
1BE	P**1 BE**ta	-500	500	100		Beta value for heat regulation.
1SE	P**1 S**ide **E**ffect	50	150	100	%	Compensation of effect for the two side bulbs.
1FF	P**1 F**ront **F**actor	0	200	100	%	Compensation of curing effect for front edge of plate.
1RF	P**1 R**ear **F**actor	0	200	100	%	Compensation of curing effect for rear edge of plate.
1GR	P**1 G**um **R**eplenish	0	100	17	‰	Gum replenish amount in permille of process time.
2AL	P**2 AL**pha	-500	500	-31		Alpha value for heat regulation.
2BE	P**2 BE**ta	-500	500	95		Beta value for heat regulation.
2SE	P**2 S**ide **E**ffect	50	150	100	%	Compensation of effect for the two side bulbs.
2FF	P**2 F**ront **F**actor	0	200	100	%	Compensation of curing effect for front edge of plate.
2RF	P**2 R**ear **F**actor	0	200	130	%	Compensation of curing effect for rear edge of plate.
3GR	P**3 G**um **R**eplenish	0	100	19	‰	Gum replenish amount in permille of process time.
GRI	Gum **R**eplenish m**I**nimum	0	120	5	sec.	Minimum amount of replenish before released.
GRA	**G**um **R**eplenish m**A**ximum	0	300	30	sec.	Maximum amount of replenish before replenish is given between plates during process.
GRD	**G**um **R**eplenish **D**istance	100	1000	250	mm	Minimum distance between plates before replenish is given.

Parameter	Description	Min.	Max.	Default	Unit	Explanation
FRS	**F**ront edge **R**egulation **S**tart	0	240	80	mm	
RRS	**R**ear edge **R**egulation **S**tart	0	240	0	mm	
RRE	**R**ear edge **R**egulation **E**nd	0	240	200	mm	
GAP	**GAP** length edge regulation	0	240	200	mm	
CUR	**CUR**rent reference heat regulation	0	15000	8500	mA	
STT	**S**tar**T** **T**emperature heat regulation	0	250	60	°C	Oven temperature setting when FU is idle and printer is printing. Min. temperature before plate is processed.
TSP	**T**ransport **SP**eed	5	50	15	cm/ min	Transport speed in process P1-P3.
BEE	**BEE**p	0	0xFF	1		Sound alert when: 0: Off. 1: When plate is ready in printer. 2: When FU is ready. 3: Both.
AUT	**AUT**o	0	1	0	bool	
IRS	**I**nfra **R**ed **S**ensor sensitivity adjustment	0	5000	50	my sec	
RGS	**R**e**G**istration **S**ystem	0	3	0		0: No registration system. 1: Side register only. 2: Front register only. 3: Front and side registers.
REG	**REG**istration system timer	0	99	30	1/10 sec	Delays when registration pins are moved down after the printer feed rollers are down.
IDS	**I**nk **D**rier **S**ystem	1	2	1		1: Original ink drier with air fan and heater (PW2000/PW2400). 2: Heat in print plane and input table.
THS	**T**able **H**eat **S**et point	15	55	28	°C	Temperature setting for input table (Only used for IDS=2).
DFT	**D**rier **F**an **T**ime	0	21600	15	sec	Time ink drier fan is active after last printing has been detected (print head moving).
DHT	**D**rier **H**eat **T**ime	0	21600	10	sec	Time heat in ink drier.
DST	**D**rier heat **S**tandby **T**ime	0	21600	0	sec	Time heat in ink drier.

Para-meter	Description	Min.	Max.	Default	Unit	Explanation
TSS	**T**able **S**tandby temperature **S**et point	15	50	28	°C	Standby temperature for input table (Only used if IDS=2).
DSS	**D**rier **S**tandby temperature **S**et point	15	50	15	°C	Standby for printer plane (Only used if IDS=2).
PDT	**P**ins **D**own **T**imer	10	3600	300	sec	Time before front register pins are moved down. This is to minimize the risk that the finishing unit is powered off with the pins in up position. To reactivate register pins activate the printer feed rollers once again.

Recommended parameters setting for PlateWriter 3000

- When the backup of parameters to restore is not available, then following changes to the default settings must be made after installation of the new software.
- Type DEF to get default values.

Then set the following parameters in order as shown:

- Ink Drier System

IDS=2 Heat in print plane and input table PW3000.

- Register System

RGS=0 No registration system.
RGS=1 Side register only.
RGS=2 Front register only.
RGS=3 Front register and side registers.

- Print Head Protection

PHP=0 No print head protection or disabled.
PHP=1 Print head protection mounted or enabled.

The following parameter settings depends on Ink Drier System (IDS):

Parameter	PW3000
IDS	2
DFS	100
DFT	10
DHS	22
DHB	not relevant
DHT	1800
DST	3600
DSS	20
TSS	20
THS	20

- Type SAV (SAVe parameters) in the USB-Hyper Terminal Window, press the Enter button after the change of the last parameter to save the changes.

Default parameters setting for PlateWriter 8000

The defaukt settings are NOT recommended settings, but the default values when Finisher Unit Firmware is installed.
See the recommended values for PlateWriter 8000 on page 3-10.

Parameter	Description	Min.	Max.	Default CFG=1	CFG=2	CFG=3	Unit	Explanation
CFG	**C**on**F**i**G**	0	3	0	0	0		Reset all parameters to factory defaults: 1: PW2000, PW2400. 2: PW3000. 3: PW8000.
OVS	**OV**en **S**ystems	1	2	1	2	2		OVS=1: Oven with 4 bulbs. OVS=2: Oven with 5 bulbs sets.
IDS	**I**nk **D**rier **S**ystem	1	2	1	2	2		1: Original ink drier with air fan and heater (PW2000/PW2400). 2: Heat in print plane and input table and small fan next to print head.
BWS	**B**ackside **W**ash **S**ystem	1	3	1	1	2		1: Disabled, old wiring 2: Disabled, new wiring 3: Enabled and new wiring
RGS	**R**e**G**ister **S**ystem	0	3	0	0	0		0: No registration system. 1: Side register only. 2: Front register only. 3: Front and side registers.
DAO	**D**rier **A**lways **O**n	0	1	0	0	0	bool	Activate ink drier permanent.
DFS	**D**rier **F**low **S**etting	20	100	80	100	100	%	Duty cycle for the ink drier fan or fan next to the print head.
DHS	**D**rier **H**eat **S**et point	15	55	28	40	22	°C	Temperature for ink drier. If IDS=2 this controls the printer plane temperature.
DHB	**D**rier **H**eat **B**eta	-200	200	-40	0	0	0.1°C	Calibration offset for ink drier temperature sensor (print plane if IDS=2).

Para-meter	Description	Min.	Max.	Default CFG=1	CFG=2	CFG=3	Unit	Explanation
1AL	P**1 AL**pha	0	500	160	160	160		Alpha value for heat regulation.
1BE	P**1 BE**ta	0	500	180	180	180		Beta value for heat regulation.
1FF	P**1 F**ront **F**actor	0	200	140	140	140	%	Compensation of curing effect for front edge of plate.
1RF	P**1 R**ear **F**actor	0	200	130	130	130	%	Compensation of curing effect for rear edge of plate.
1GR	P**1 G**um **R**eplenish	0	100	17	17	17	‰	P1 Gum replenish amount in permille of process time.
2AL	P**2 AL**pha	0	500	160	160	160		Alpha value for heat regulation.
2BE	P**2 BE**ta	0	500	180	180	170		Beta value for heat regulation.
2FF	P**2 F**ront **F**actor	0	200	140	140	140	%	Compensation of curing effect for front edge of plate.
2RF	P**2 R**ear **F**actor	0	200	130	130	130	%	Compensation of curing effect for rear edge of plate.
2GR	P**2 G**um **R**eplenish	0	100	17	17	17	‰	Gum replenish amount in permille of process time.
3AL	P**3 AL**pha	0	500	160	160	160		Alpha value for heat regulation.
3BE	P**3 BE**ta	0	500	190	190	180		Beta value for heat regulation.
3FF	P**3 F**ront **F**actor	0	200	140	140	140	%	Compensation of curing effect for front edge of plate.
3RF	P**3 R**ear **F**actor	0	200	130	130	130	%	Compensation of curing effect for rear edge of plate.
3GR	P**3 G**um **R**eplenish	0	100	17	17	17	‰	Gum replenish amount in permille of process time.
4AL	P**4 AL**pha	0	500	170	170	170		Alpha value for heat regulation.
4BE	P**4 BE**ta	0	500	145	145	135		Beta value for heat regulation.
4FF	P**4 F**ront **F**actor	0	200	140	140	140	%	Compensation of curing effect for front edge of plate.

Parameter	Description	Min.	Max.	Default CFG=1	CFG=2	CFG=3	Unit	Explanation
4RF	P**4 R**ear **F**actor	0	200	130	130	130	%	Compensation of curing effect for rear edge of plate.
4GR	P**4 G**um **R**eplenish	0	100	18	18	18	‰	Gum replenish amount in permille of process time.
5AL	P**5 AL**pha	0	500	150	150	150		Alpha value for heat regulation.
5BE	P**5 BE**ta	0	500	90	90	80		Beta value for heat regulation.
5FF	P**5 F**ront **F**actor	0	200	140	140	140	%	Compensation of curing effect for front edge of plate.
5RF	P**5 R**ear **F**actor	0	200	130	130	130	%	Compensation of curing effect for rear edge of plate.
5GR	P**5 G**um **R**eplenish	0	100	18	18	18	‰	Gum replenish amount in permille of process time.
6AL	P**6 AL**pha	0	500	150	150	150		Alpha value for heat regulation.
6BE	P**6 BE**ta	0	500	50	50	40		Beta value for heat regulation.
6FF	P**6 F**ront **F**actor	0	200	140	140	140	%	Compensation of curing effect for front edge of plate.
6RF	P**6 R**ear **F**actor	0	200	130	130	130	%	Compensation of curing effect for rear edge of plate.
6GR	**6 G**um **R**eplenish	0	100	19	19	19	‰	Gum replenish amount in permille of process time.
GRI	**G**um **R**eplenish m**I**nimum	0	120	5	5	5	sec	Minimum amount of replenish before released.
GRA	**G**um **R**eplenish m**A**ximum	0	300	30	30	30	sec	Maximum amount of replenish before replenish is given between plates during process.
GRD	**G**um **R**eplenish **D**istance	100	1000	250	250	250	mm	Minimum distance between plates before replenish is given.
FRS	**F**ront edge **R**egulation **S**tart	0	500	100	100	100	mm	

Para-meter	Description	Min.	Max.	Default CFG=1	CFG=2	CFG=3	Unit	Explanation
FRE	**F**ront edge **R**egulation **E**nd	0	900	200	200	200		
RRS	**R**ear edge **R**egulation **S**tart	0	500	200	200	200	mm	
RRE	**R**ear edge **R**egulation **E**nd	0	900	300	300	300	mm	
PWB	**P**o**W**er **B**eta	-500	-1	-230	-230	-230		Determines the relative level of power when max transport plate speed is reached.
GAP	**GAP** length edge regulation	0	240	200			mm	
CUR	**CUR**rent reference heat regulation	0	15000	8400			mA	
STT	**S**tar**T** **T**emperatur e heat regulation	0	250	60	60	60	°C	Oven temperature setting when FU is idle and printer is printing.
PWC	**P**o**W**er **C**enter	50	100	100	100	80	%	Reduce power of center bulb pair in oven to lower the the plate center temperature.
TSA	**T**ransport **S**peed m**A**x	100	650	250	350	450	mm/ min	Max. transport speed of the plate during curing.
TSP	**T**ransport **SP**eed	5	50	15			cm/ min	Transport speed in process P1-P3.
BEE	**BEE**p	0	0xFF	1	1	1		Sound alert when: 0: Off 1: When plate is ready in printer. 2: When FU is ready. 3:Both.
AUT	**AUT**o	0	1	0			bool	
IRS	**I**nfra **R**ed **S**ensor sensitivity adjustment	0	5000	50	50	50	my sec	Time that IR LED is on prior to reading sensor value. The higher the value the higher the sensitivity.
REG	**REG**istratio n system timer	0	99	30	30	30	1/10 sec	Delays when registration pins are moved down after the printer feed rollers are down.

Para-meter	Description	Min.	Max.	Default CFG=1	CFG=2	CFG=3	Unit	Explanation
THS	**T**able **H**eat **S**et point	15	55	15	45	25	°C	Temperature setting for input table (Only used if IDS=2).
DFT	**D**rier **F**an **T**ime	0	21600	15	10	10	s	Time ink drier fan is active after last printing has been detected (print head moving).
DHT	**D**rier **H**eat **T**ime	0	21600	10	1800	1800	s	Time heat in ink drier print plane and input table is active after last printing has been detected.
TSS	**T**able **S**tandby temperature **S**et point	15	50	15	42	22	°C	Standby temperature for input table (Only used if IDS=2).
DSS	**D**rier **S**tandby temperature **S**et point	15	50	15	30	20	°C	Standby for printer plane.
PDT	**P**ins **D**own **T**imer	10	3600	300	300	300	s	Time before front register pins are moved down. This is to minimize the risk that the finishing unit is powered off with the pins in up position. To reactivate register pins activate the printer feed rollers once again.
BWE	**B**ackside **W**ash **E**ngage distance	0	150	50	50	50	mm	Distance from plate front edge to gum roller when backside wash is engaged.
BWR	**B**ackside **W**ash **R**elease distance	0	150	50	80	80	mm	Distance from plate rear edge to gum roller when backside wash is released.
TPW	**T**otal **P**o**W**er	1000	3000	2500	2500	2500	W	Power limit for oven speed is reduced to lower power consumption.
OPW	**O**ven **P**o**W**er	1000	3000	2000	2000	2000	W	Nominal power of all bulbs in oven.
UPW	input table '**U**nder' heat **P**o**W**er	0	1000	0	300	500	W	Actual power of input table heat.

DPW	**D**rier **P**o**W**er	0	1000	750	400	500	W	Actual power of ink drier or print plane heater.
PHP	**P**rint **H**ead **P**rotection	0	1	0	0	0	bool	Enables or disables print head protection.

Recommended parameters setting for PlateWriter 8000

- Set CFG=3.

Then set the following parameters in order as shown:

- Backside Wash

BWS=2 Backside wash not mounted or disabled.
BWS=3 Backside wash mounted and enabled.

- Register System

RGS=0 No registration system.
RGS=1 Side register only.
RGS=2 Front register only.
RGS=3 Front register and side registers.

- Print Head Protection

PHP=0 No print head protection or disabled.
PHP=1 Print head protection mounted or enabled.

Parameter	PW 8000
RGS	2
CFG	3
BWS	2
PHP	1

- Type SAV (SAVe parameters) in the USB-Hyper Terminal Window, press the Enter button after the change of the last parameter to save the changes.

Commands

The following commands are used for diagnostics of the Finisher.

DEF	**DEF**ault parameters	Set all parameters to their default values.
DIC	**DI**agnostic **C**urren	Test current sensor on oven in finishing unit.
DII	**DI**agnostic **I**nput	Test system inputs.
DIO	**DI**agnostic **O**utput	Test system outputs.
LPA	**L**ist **PA**rameters	List all parameters and software version information.
SAV	**SAV**e parameters	Save all parameters to flash.

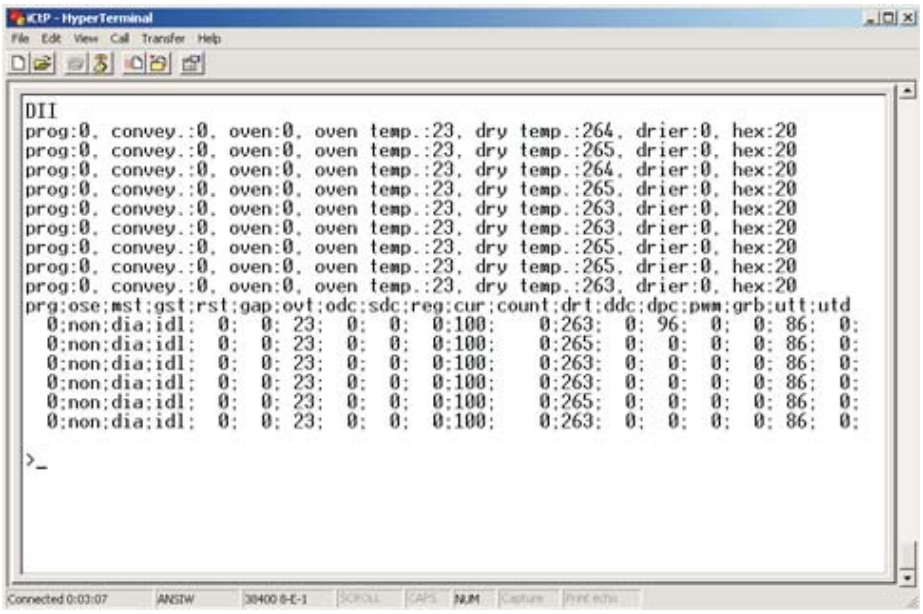
To run any of the above commands the Finisher must be in program "0" on the toggle switch/program selector. Wait until the screen show the prompt ">" and then type the three characters needed.

If you type an error you cannot erase and retype. Simply press the Enter key on the keyboard and the FU will reply with a "?" and a new ">". Then try again.

Diagnostic Input

- Type DII and press Enter.

The screen will start to show the state of the input sensors:


COM1 - HyperTerminal
File Edit View Call Transfer Help
DII
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:264, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:265, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:264, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:265, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:263, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:263, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:265, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:265, drier:0, hex:20
prog:0, convey.:0, oven:0, oven temp.:23, dry temp.:263, drier:0, hex:20
prg;ose;mst;gst;rst;gap;ovt;odc;sdc;reg;cur;count;drt;ddc;dpc;pwm;grb;utt;utd
0;non;dia;idl; 0; 0; 23; 0; 0; 0;100; 0;263; 0; 96; 0; 0; 86; 0;
0;non;dia;idl; 0; 0; 23; 0; 0; 0;100; 0;265; 0; 0; 0; 0; 86; 0;
0;non;dia;idl; 0; 0; 23; 0; 0; 0;100; 0;263; 0; 0; 0; 0; 86; 0;
0;non;dia;idl; 0; 0; 23; 0; 0; 0;100; 0;263; 0; 0; 0; 0; 86; 0;
0;non;dia;idl; 0; 0; 23; 0; 0; 0;100; 0;265; 0; 0; 0; 0; 86; 0;
0;non;dia;idl; 0; 0; 23; 0; 0; 0;100; 0;263; 0; 0; 0; 0; 86; 0;
>_
Connected 0:03:07
ANSIW
38400 8-E-1
NUM

Input sensors:

prog: toggle switch with program selected.
convey.: optic sensor that detect the plate in the infeed of the FU.
oven: mechanic switch that is placed at the very entry of the oven.
oven temp.: shows the temperature of the plate curing oven.
dry temp.: shows the ink drier temperature in 0,1 °C (26,4 °C).
hex: N/A

prg: Program selection.
ose: Oven State and Error, controlling the green and red LED.
- **non:** Off (as in diagnostic).
- **rdy:** Ready.
- **pcs:** Process.
- **pdp:** Plate during process.
- **pll:** Plate is too short or too long.
- **nrd:** Not ready as in idle.
- **por:** Program selection is out of range.
- **blb:** Bulb error.
- **mot:** Motor error.

mst: Main State.
- **idl:** Idle.
- **pcs:** Process (P1-3).
- **rin:** Gum/rinse (P4).
- **dia:** Diagnostic (P0).
- **err:** Error.

gst: Gum State, only valid when Main State is pcs.
- **wfr:** Wait for front of plate to reach gum section.
- **wrr:** Wait for rear edge to exit rollers.
- **wrg:** Gumming, wait for plate exit gum.
- **end:** Plate has left unit.

rst: State of registration system.
- **0:** Start
- **1:** On its way towards home position.
- **2:** Waiting to be activated by lift up feed rollers.
- **3:** On its way towards upper position.
- **4:** Waiting to be de-activated by lift up feed rollers.
- **5:** Pins havent reached their home position in time, error waiting to be de-activated by lift up feed rollers by user.
- **6:** Pins havent reached their upper position in time, error waiting to be de-activated by lift up feed rollers by user.

gap: Distance between consecutive plates for determing is replenish can be given (mm).
ovt: Oven temperature (°C).
odc: Oven Duty cycle (%).
sdc: Side compesation Duty cycle.
reg: Actual compensation for regulation as in front and rearedge compensation(%)
cur: Measured current as a percentage of nominal (%), used for compensation for mains variations.
count: Taco pulse count since plate entry.
drt: Drier temperature (0,1 °C).
ddc: Drier duty cycle (%).
dpc: Drier pass counter, indication of sensor for printer printing, head pass (Times per second).

pwm: PWM for transport motor (%).
grb: Gum replenish bank, accumulated replenish (sec).
utt: Under floor heater temperature in feed table (gen. III only).
utd: Duty cycle of under floor heater (gen. III only).

More potential input sensors:

ost: Oven State, only valid when Main State is pcs.
wfs: Wait for frontedge at oven sensor (switch not IR sensor).
wmt: Wait for minimum temperature in oven.
wfo: Wait for frontedge in oven.
ref: Regulation for frontend of plate.
ren: Regulation for center part of plate.
rer: Regulation for rear end of plate.
wfr: Wait for ready for next plate.
end: Wait for ready for next plate.
jst: Jog State, only valid when Main State is idl.
nrd: Not ready, switch sensor covered without IR sensor.
rdy: Ready.
exi: Plate detected by IR sensor.

php: Print head state
- **dis:** Disabled.
- **arm:** Enabled and ready.
- **stp:** Print head is stopped (cover open), wait for feed roller to go up.
- **wai:** Waiting for feedroller to go down. (then go to 'arm' state)

When press Enter again the readout will change, so that it lists the same parameters as when in other programs than "0". A header will indicate the parameters after each 10 lines of print out.

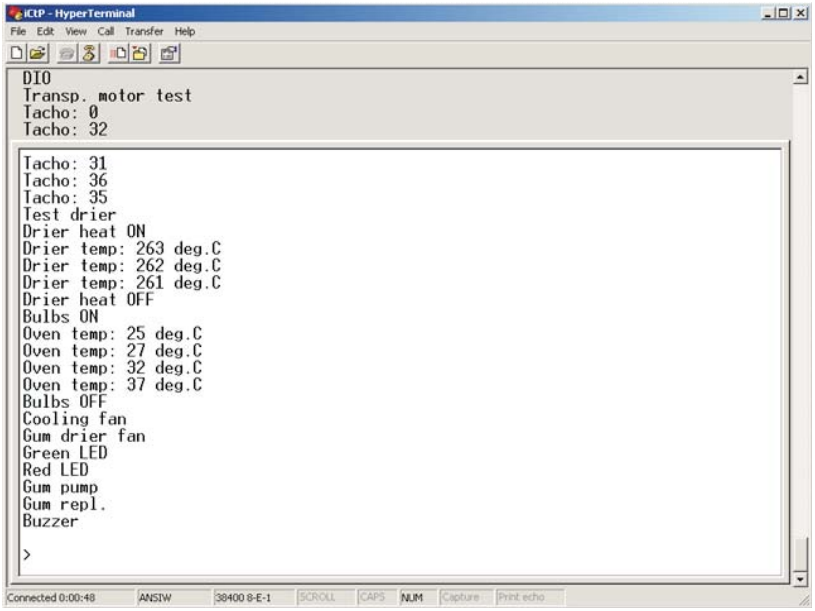
Diagnostic Output

- Type DIO and press Enter.

The screen will start to show the transport motor test and readout the tacho signal from the main drive motor. It will continue to read out the tacho until Enter is pressed again.

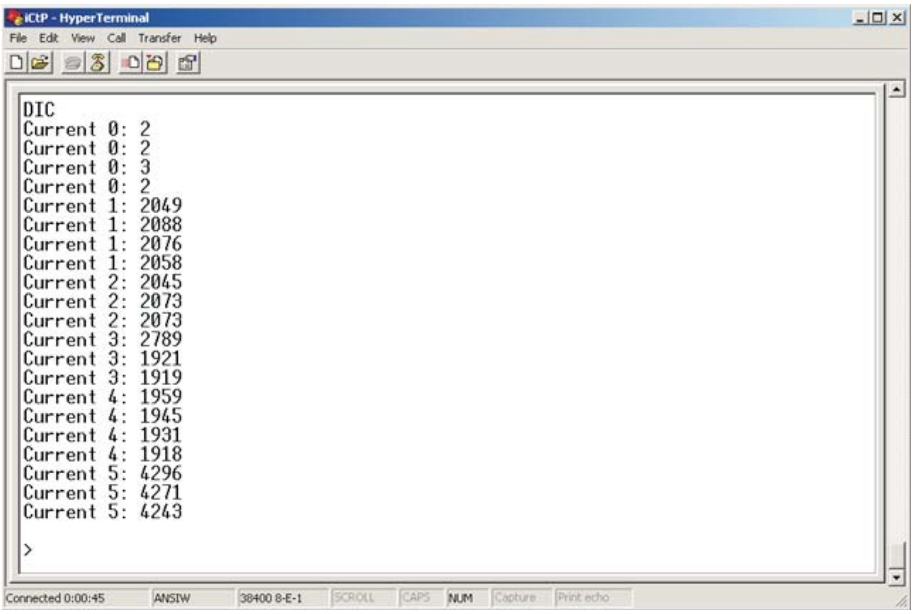
Next is the Test drier, where the ink drier temperature will be listed and the heater will be powered on.

Do not keep this one for a prolonged period. The heating element will continue to be one until the enter key is hit again.



Diagnostic Current

- Type DIC and press Enter.



The values shown are in mAmps and as it lists "Current 1" through "Current 4" it will power on one lamp at a time. The readout sholud collerate to the wattage of the lamps in the curring unit. (500 watt lamp will readout approx. 2500 at 220 volts, 400 watt lamp will readout approx. 2000 at 220 volts etc.)

Adjustments

Plate temperature settings (BE)

Attach thermostrips to the back of a plate and run it through the finishing unit using a suitable program (see the User Manual, Part 2: Daily use, Finishing).
Check that the temperature is between 170 and 200 all over the plate.
Adjust parameters 1BE, 2BE or 3BE depending on which program 1, 2 or 3 is selected.

If the temperature is lower than the range mentioned above increase the value by 5 or 10 and run the plate again with new strips. Repeat until temperature is within range for all plate gauges used.

Adjusting temperature settings

Adjust parameters 1BE, 2BE, 3BE for PW 2500/3000/NW or 1BE, 2BE, 3BE, 4BE, 5BE or 6BE for PW 8000 depending on which program 1-3 or 1-6 is selected. If the temperature on plate is too low decrease the value by 10-20 and run the plate again with new strips. Repeat until the temperature is within range for all plate gauges used.
Remember to type SAV to save temperature settings after they have been changed.

Gum/water replenishment settings (GR)

If the gum becomes thicker during the day it might be necessary to increase the GR value. Increase 1GR, 2GR or 3GR (depending on which program 1, 2 or 3 is selected) or 1GR, 2GR, 3GR, 4GR, 5GR or 6GR (depending on which program 1, 2, 3, 4, 5 or 6 value by 1 or 2 but keep close attention that the iFinisher does not become too thin. Check that the level in the iFinisher container actually decreases (and **never** increases) during a day's production.

Part 4: RIP Installation

Overview

The installation procedure described in this chapter covers the following issues:

- Installation of the Epson 7700/9700 printer driver
- Connecting PlateWriter/NewsWriter and proofer to the RIP workstation
- Installation of Navigator RIP
- Installation of plug-ins and manuals
- Launching and configuring the Navigator RIP
- Creating and calibrating a proofing Page Setup

Connecting the System and optional proofer to your RIP workstation

Having charged the PlateWriter/NewsWriter System with Liquid Dot (see "Hardware Installation" manual for details), you should already have it plugged into the mains.
To complete the installation of the driver, you must connect your PlateWriter/NewsWriter System to your computer.
If you have also purchased the optional proofer, you should now go ahead and install this, following the manufacturer's instructions.

Epson 4880 & 7880 proofers only

Locate the Installation CD.
Switch the printer on.
Insert the ink cartridges and allow the printer to perform the ink charging cycle (about 10 minutes).
Start the installation from the installer CD supplied by Epson with the system or you can use the **PlateWriter RIP 8 Installer DVD** where the drivers for Epson 4880 and 7880 also can be found.
When the installation software starts to search for the printer, connect the proofer to your RIP workstation.
When it is installed, quit the installer and restart your workstation.

Installing the Navigator RIP for Windows

General

The Navigator RIP is installed on the RIP workstation delivered with the system. This workstation has been specifically configured to deliver the best performance possible and includes Windows XP Pro, 2 GB of interleaved RAM, and about 150 GB of available space on the hard drive after installation.
Should the RIP not be installed on your RIP workstation or, if you for some reason need to reinstall it, the below described installation procedures outline the steps necessary for installation of the Navigator RIP, the Inkjet PlateMaking X1 plug-in, the iCTP proofing plug-in, the iScreen plug-in, a predefined RIP setup with limited calibration profiles, the user documentation and Acrobat Reader 9.

Before installing the Navigator RIP

Set up the PlateWriter/NewsWriter hardware as described in the separate Hardware Installation manual.

Overview

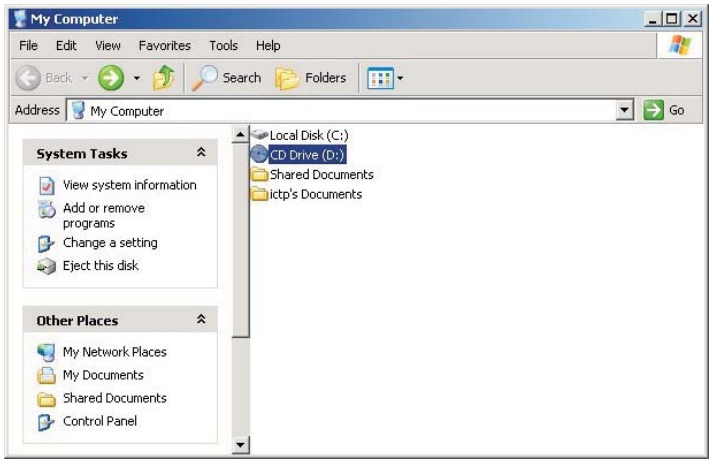
Installing and configuring the Navigator RIP for PlateWriter/NewsWriter on Windows XP Pro consists of these basic steps:
Installation of the RIP and dongle software.

Do NOT plug in the USB dongle before you have completed installation of the dongle software.

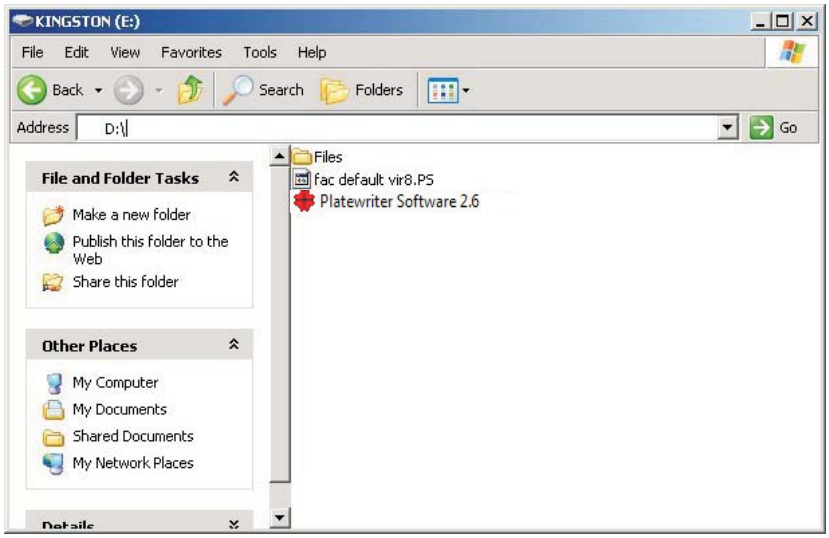
Installation of the Inkjet PlateMaking plug-in, calibration profiles and the iScreen plug-in.
If required, installation of the optional Epson proofing plug-in and the associated Epson screening libraries.
Installation of Adobe Acrobat Reader.
Configuring of the RIP by printing **GJ factory default** file and entering passwords.

Installing the Navigator RIP, plug-ins and manuals

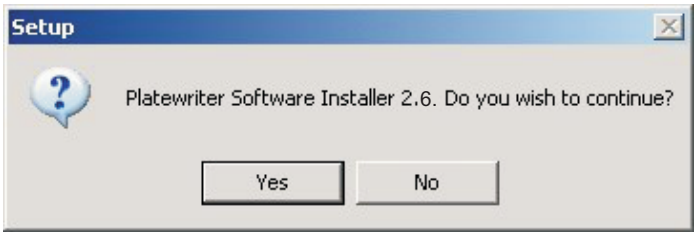
- Insert the **PlateWriter Installer DVD** into the RIP workstation.



- Locate the **CD Drive** and open it. Double-click the **Platewriter Software 2.6** icon.



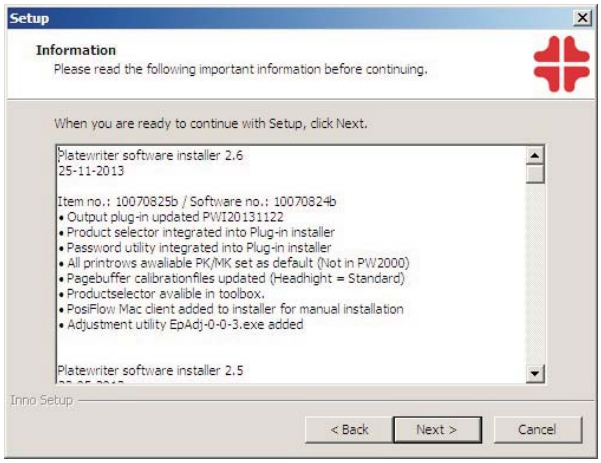
- New window will appear to ask if you wish to continue and run the **Software Installer**. Click **Yes**.



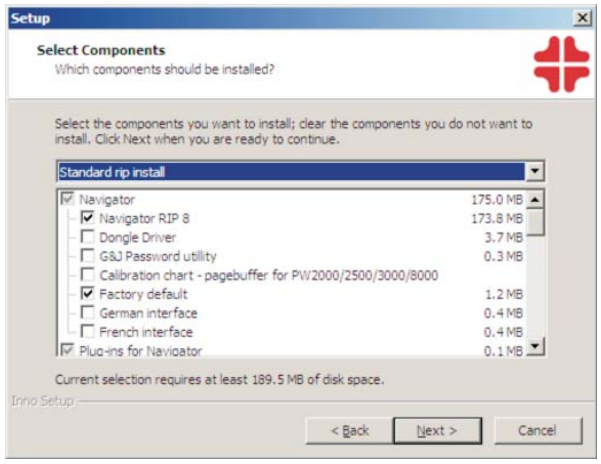
- **Software Installer** welcome window appears. Click **Next** to continue.

Setup
Welcome to the Platewriter Software Installer 2.6 Setup Wizard
This will install Platewriter Software Installer 2.6 version the Platewriter software on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

- Click **Next** to continue on the **Information** window listing the available components.


Setup
Information
Please read the following important information before continuing.
When you are ready to continue with Setup, click Next.
Platewriter software installer 2.6
25-11-2013
Item no.: 10070825b / Software no.: 10070824b
• Output plug-in updated PWI20131122
• Product selector integrated into Plug-in installer
• Password utility integrated into Plug-in installer
• All printrows awaliable PK/MK set as default (Not in PW2000)
• Pagebuffer calibrationfiles updated (Headhight = Standard)
• Productselector avalible in toolbox.
• PosiFlow Mac client added to installer for manual installation
• Adjustment utility EpAdj-0-0-3.exe added
Platewriter software installer 2.5
Inno Setup
< Back
Next >
Cancel

- In the **Select Components** window you can choose **Custom** or **Standard install**. The **Standard install** will select the most likely components to install.


Setup
Select Components
Which components should be installed?
Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.
Standard rip install
Navigator 175.0 MB
Navigator RIP 8 173.8 MB
Dongle Driver 3.7 MB
G&J Password utility 0.3 MB
Calibration chart - pagebuffer for PW2000/2500/3000/8000
Factory default 1.2 MB
German interface 0.4 MB
French interface 0.4 MB
Plug-ins for Navigator 0.1 MB
Current selection requires at least 189.5 MB of disk space.
Inno Setup
< Back
Next >
Cancel

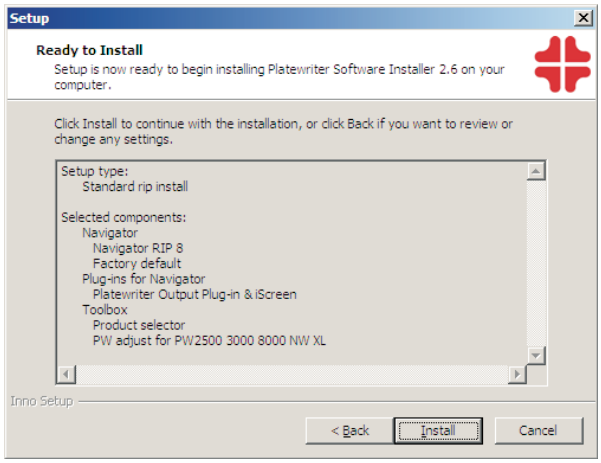
- In general we recommend selecting the components from the **Standard install**, and then you can add on additional components.
- Please refer to the list on the next two pages.

List of the components available for installation:

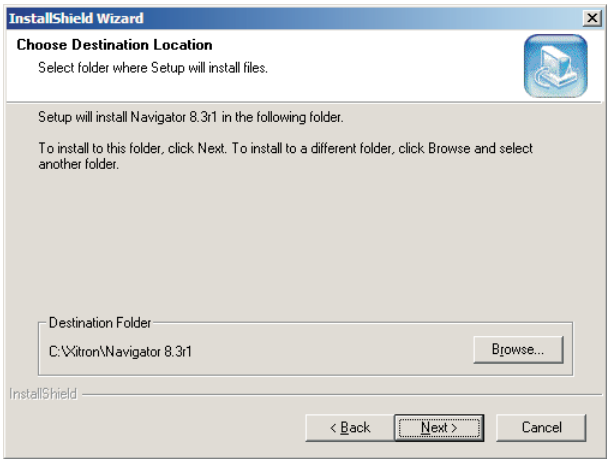
Categories	Item	Comments
Navigator	**Xitron Navigator RIP 8**	This is the main Navigator RIP 8 application and **must** be installed.
	Dongle Driver	Installs the Sentinel Dongle Driver and is **required** to run the RIP.
	G&J Password Utility	Application to configure the passwords for iScreen and PlateWriter Output Plug-in and **must** be installed.
	Calibration chart	Test charts with predefined calibrations selected based on the standards in the RIP.
	Factory default	Installs the file which can be activated in the RIP to configure the memory settings, create some sample Page Setups, and install a number of preset calibration curves for different printing presses. It is highly **recommended** to install it.
	German/French interface	Installs German/French user interface to the RIP. **Do not select this option when installing the RIP!**
Plug-ins for Navigator	**Platewriter Output Plug-in**	Installation of this feature will enable the Inkjet PlateMaking X1 plug-in for the PW2500/PW3000/PW8000/NW/NW XL. This is required for the RIP to communicate with the System and **must** be installed.
	CIP Plug-in	**Must** be purchased as an option and is used to control the ink level on press based on reading from the RIP.
	v-DOT II	Glunz & Jensen includes a standard proofing option for Epson 4880, 7880 and 9880 with the iCtP system. For advanced proofing options you will need to purchase ColorPro option.
	v-DOT III	
Additional files	**GJ iPosition**	Copy the installer file for iPosition to the RIP hard drive. If installed, the program will run a full time limited version of the program. A dongle is required to run the application.
	GJ Wallpaper	Installs Glunz & Jensen special wallpaper.
	Sample files	Sample files and test files in PDF.
	PosiFlow 5 workflow software	Software that makes possible to control the RIP software from one or more remote computers and set up different queues/actions.

Categories	Item	Comments
	ExtremeZ 5.03	Software that provides printing connectivity across platforms. The program is used for creating virtual printers with AppleTalk or Bonjour protocols. Use this to print directly from your Mac/PC to a Spool/Hot Folder on your RIP PC.
	ExtremeZ 6.03	
	ExtremeZ 7.1x14	
	Maintenance movies	Video showing the maintenance of the PW2000/2400/2500/3000/NW ink system. Highly recommended!
	TrapPro default settings	Installs the default settings for trapping, when using the TrapPro in the RIP.
Driver setup	**PW2000 printer driver**	Installs the printer driver to the selected variant of the PlateWriter/NewsWriter. The PlateWriter/NewsWriter must be attached doing the install to configure the correct USB port.
	PW2400 printer driver	
	PW3000 printer driver	
	PW8000 printer driver	
Toolbox	**Product selector**	After selection of the RIP, is needed to select the type of the PlateWriter, matched to the RIP. Required to set up output plug-in.
	PW adjust for PW3000/PW8000	Software and print-files for the adjustment of the PW3000/PW8000. Highly recommended to complete the plate writer adjustment.
	PWAdjust utility	Adjustment utility for the PlateWriter 2000/2400 platform.
	Raw Print adjust utility	Software allowing to send print-files (prn.) directly to the PlateWriter.
	Epson net tool	Software to configure the network card in the PlateWriter/NewsWriter image engine. Only used if you want to connect the engine via Ethernet.
	Windows PS driver	For creating a Windows PostScript driver.
	PPDs	PPDs for Windows and Mac OS.
	iCtP HyperTerminal	Installs HyperTerminal settings to Windows used to access the software of the finishing unit.
	Adobe Reader	For viewing the manuals and viewing PDF's supplied by customers for printing within the RIP. We **recommend** to install this application.
	Bonjour PS	Install Bonjour for Windows to connect with printing from the Windows platform.

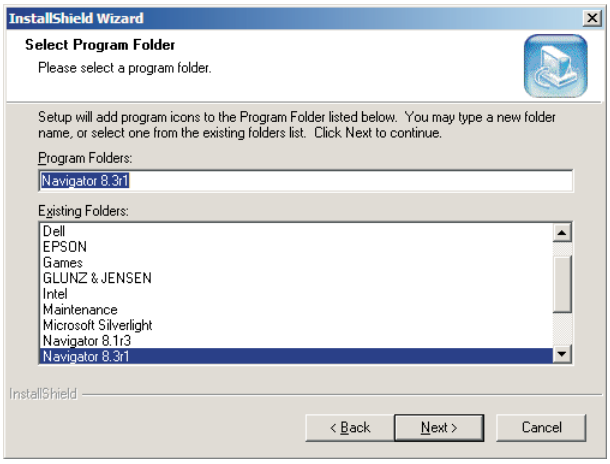
- After selecting the components, confirm your choice by clicking **Next**.
- Then press **Install** to continue.



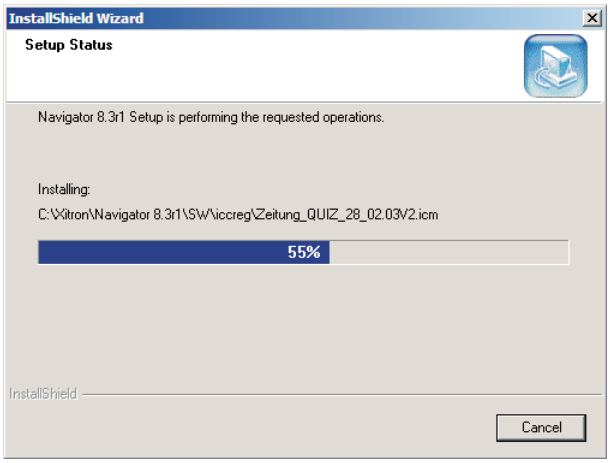
- Select the destination folder for the installation of the RIP. Make sure to accept the default **C:\Xitron\Navigator 8.3r1** and click **Next** to continue.


InstallShield Wizard
Choose Destination Location
Select folder where Setup will install files.
Setup will install Navigator 8.3r1 in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Xitron\Navigator 8.3r1
Browse...
InstallShield
< Back
Next >
Cancel

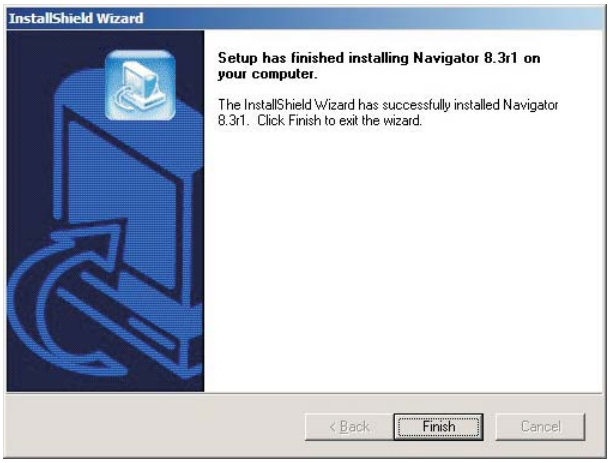
- Then click **Next** to accept adding Navigator shortcut in the **Programs** menu of Windows.



- The installation of the Navigator RIP will start.



- When the installation is done, click **Finish.**


InstallShield Wizard
Setup has finished installing Navigator 8.3r1 on your computer.
The InstallShield Wizard has successfully installed Navigator 8.3r1. Click Finish to exit the wizard.
< Back
Finish
Cancel

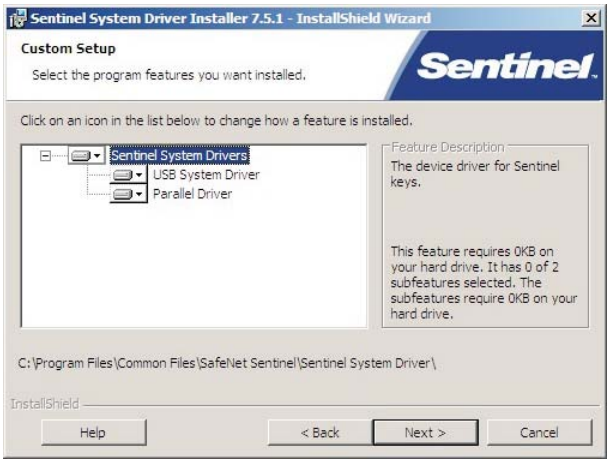
- The installer will continue to install the next item from the selected list of components, the Sentinel driver.
  When the welcome window appears click **Next** to continue.

Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Welcome to the InstallShield Wizard for Sentinel System Driver Installer 7.5.1
The InstallShield(R) Wizard will install Sentinel System Driver Installer 7.5.1 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
Sentinel
< Back
Next >
Cancel

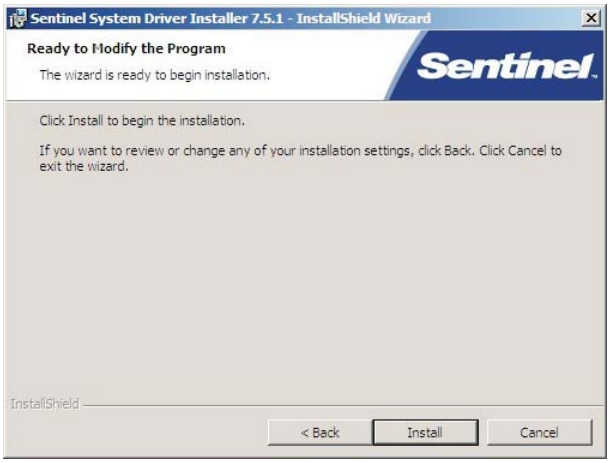
- When the Program Maintenance window appears, select **Modify** and click **Next** to continue.

Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Program Maintenance
Modify, repair, or remove the program.
Sentinel
Modify
Change which program features are installed. This option displays the Custom Selection dialog in which you can change the way features are installed.
Repair
Repair installation errors in the program. This option fixes missing or corrupt files, shortcuts, and registry entries.
Remove
Remove Sentinel System Driver Installer 7.5.1 from your computer.
InstallShield
< Back
Next >
Cancel

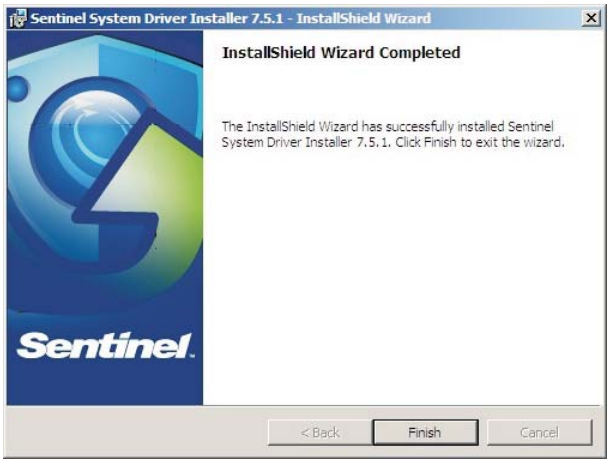
- In the Custom Setup window select **Sentinel System Drivers** and click **Next** to continue.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Custom Setup
Select the program features you want installed.
Sentinel
Click on an icon in the list below to change how a feature is installed.
Sentinel System Drivers
USB System Driver
Parallel Driver
Feature Description
The device driver for Sentinel keys.
This feature requires 0KB on your hard drive. It has 0 of 2 subfeatures selected. The subfeatures require 0KB on your hard drive.
C:\Program Files\Common Files\SafeNet Sentinel\Sentinel System Driver\
InstallShield
Help
< Back
Next >
Cancel

- Click **Install** to begin the installation.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
Ready to Modify the Program
The wizard is ready to begin installation.
Sentinel
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

- After the installation a dialogue box will appear to inform that the installation was successful. Click **Finish** to continue.


Sentinel System Driver Installer 7.5.1 - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed Sentinel System Driver Installer 7.5.1. Click Finish to exit the wizard.
Sentinel
< Back
Finish
Cancel

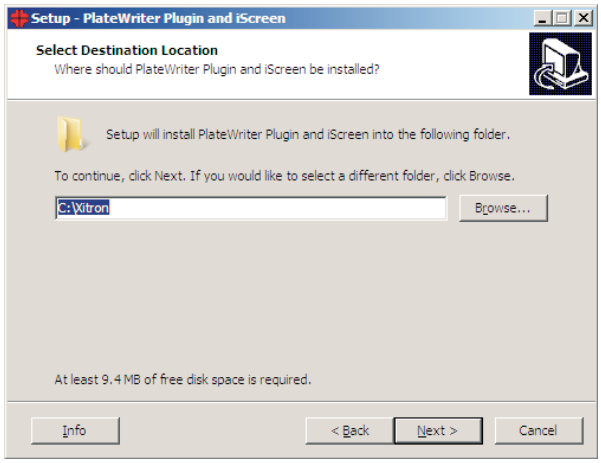
- A dialog box will appear to inform that the setup has finished installing PlateWriter Plugin and iScreen, click **Finish** to continue.

Setup - PlateWriter Plugin and iScreen
Completing the PlateWriter Plugin and iScreen Setup Wizard
Setup has finished installing PlateWriter Plugin and iScreen on your computer.
Click Finish to exit Setup.
Info
Finish

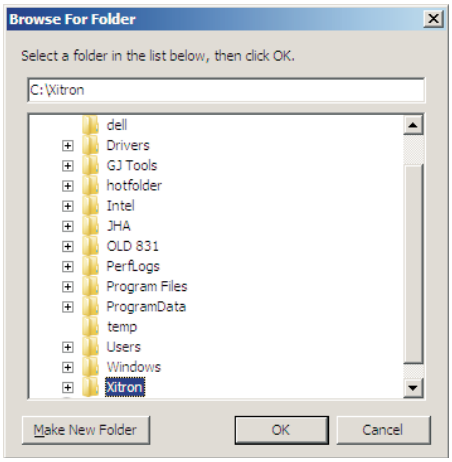
- Click **Next** to continue.

Setup - PlateWriter Plugin and iScreen
Welcome to the PlateWriter Plugin and iScreen Setup Wizard
This will install PlateWriter Plugin and iScreen version 20131122 to a selected RIP folder on your computer.
Click Next to continue, or Cancel to exit Setup.
Info
Next >
Cancel

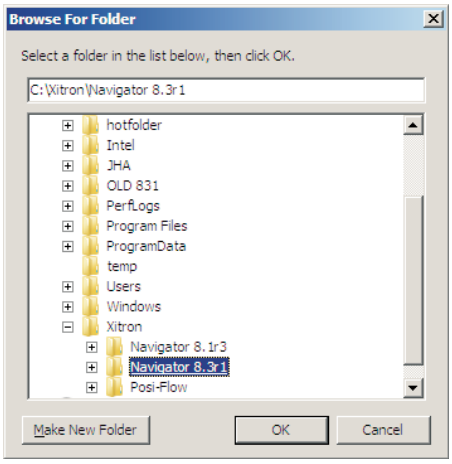
- Select Destination Location for Plugin and iScreen box will appear, click **Browse** to select folder.


Setup - PlateWriter Plugin and iScreen
Select Destination Location
Where should PlateWriter Plugin and iScreen be installed?
Setup will install PlateWriter Plugin and iScreen into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Xitron
Browse...
At least 9.4 MB of free disk space is required.
Info
< Back
Next >
Cancel

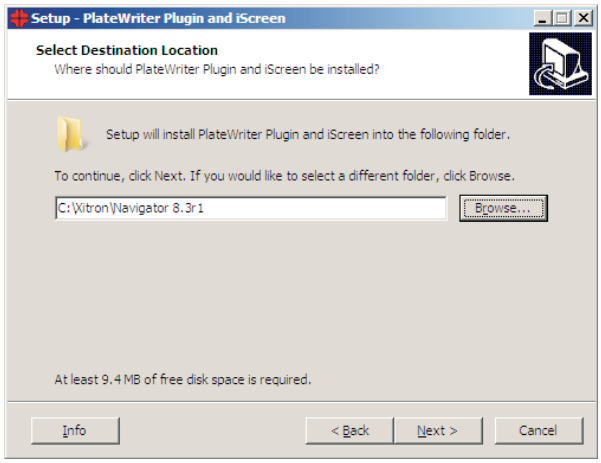
- Select Xitron....



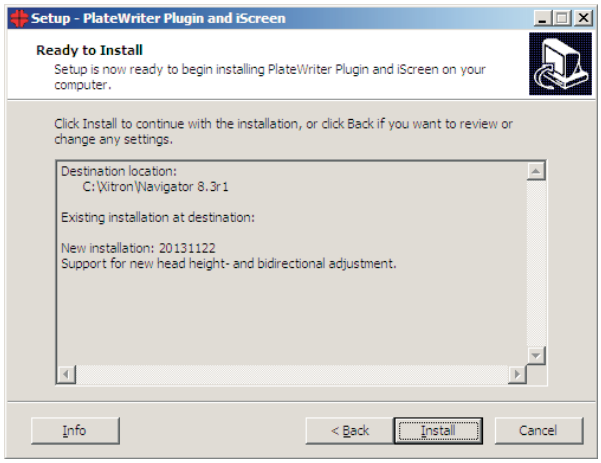
- Select **Navigator 8.3r1** and click **OK** to continue.



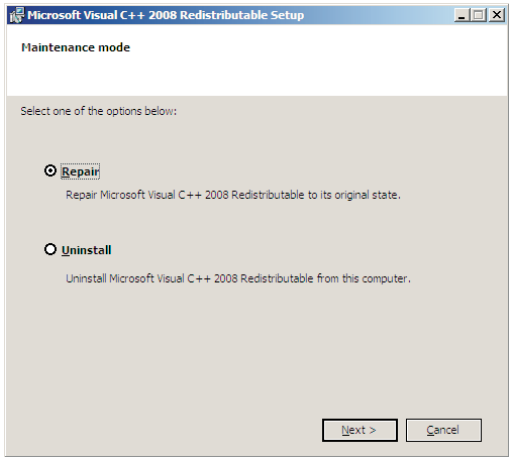
- Click **Next** to continue.


Setup - PlateWriter Plugin and iScreen
Select Destination Location
Where should PlateWriter Plugin and iScreen be installed?
Setup will install PlateWriter Plugin and iScreen into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Xitron\Navigator 8.3r1
Browse...
At least 9.4 MB of free disk space is required.
Info
< Back
Next >
Cancel

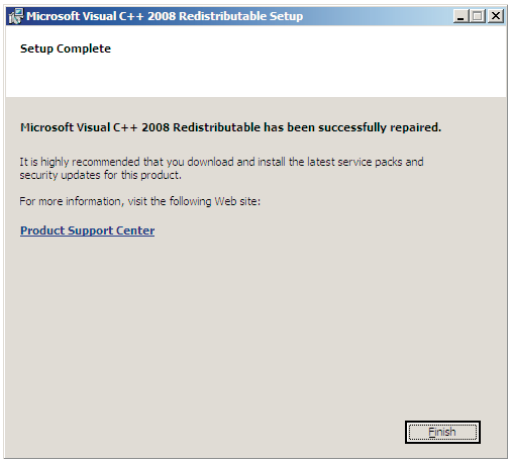
- Ready to Install box will appear, click **Install** to continue the installation.


Setup - PlateWriter Plugin and iScreen
Ready to Install
Setup is now ready to begin installing PlateWriter Plugin and iScreen on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Xitron\Navigator 8.3r1
Existing installation at destination:
New installation: 20131122
Support for new head height- and bidirectional adjustment.
Info
< Back
Install
Cancel

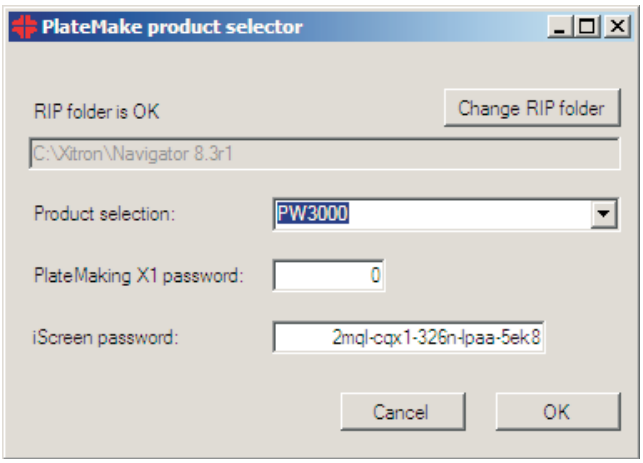
- Maintenance mode box will appear, select **Repair** and click **Next** to continue.


Microsoft Visual C++ 2008 Redistributable Setup
Maintenance mode
Select one of the options below:
Repair
Repair Microsoft Visual C++ 2008 Redistributable to its original state.
Uninstall
Uninstall Microsoft Visual C++ 2008 Redistributable from this computer.
Next >
Cancel

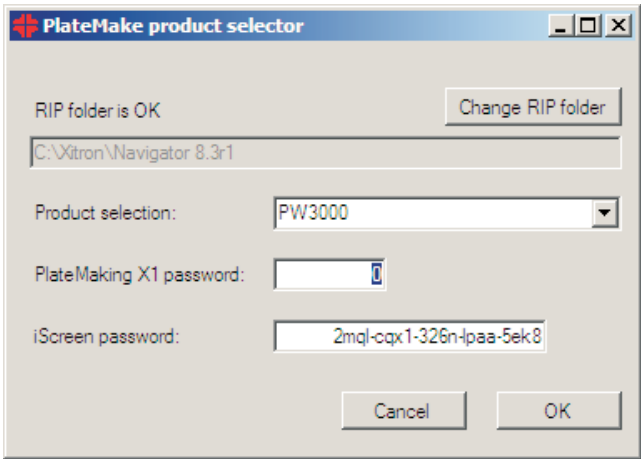
- After the Setup is complete, click **Finish** to continue.


Microsoft Visual C++ 2008 Redistributable Setup
Setup Complete
Microsoft Visual C++ 2008 Redistributable has been successfully repaired.
It is highly recommended that you download and install the latest service packs and security updates for this product.
For more information, visit the following Web site:
Product Support Center
Finish

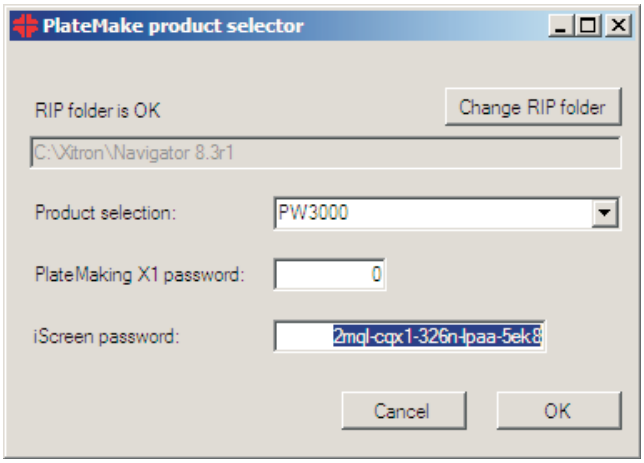
- After the PlateMake product selector box will appear, select **PW3000** in the Product selection row and click **OK**.



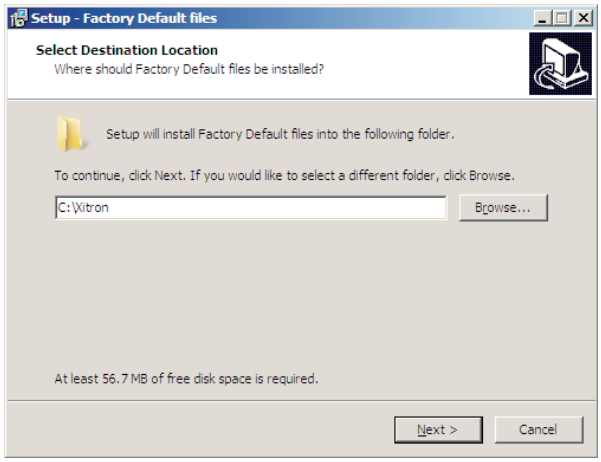
- Write the PlateMaking X1 password in window (see IJMPX1 code from the code sheet).



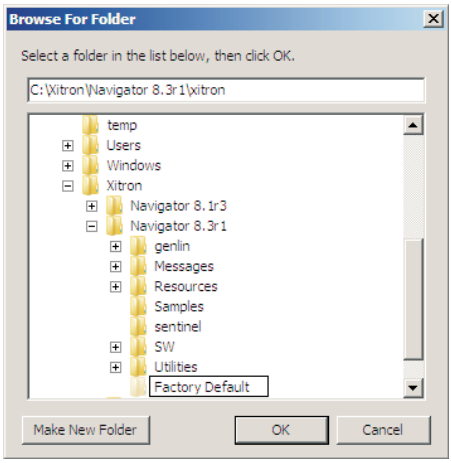
- Write the iScreen password in window (see iScreen code from the code sheet).



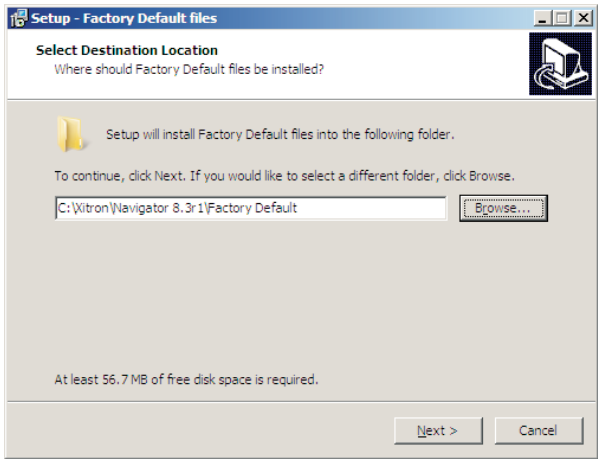
- A Select Destination Location for Factory Default files box will appear, click **Browse** to select folder.


Setup - Factory Default files
Select Destination Location
Where should Factory Default files be installed?
Setup will install Factory Default files into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Xitron
Browse...
At least 56.7 MB of free disk space is required.
Next >
Cancel

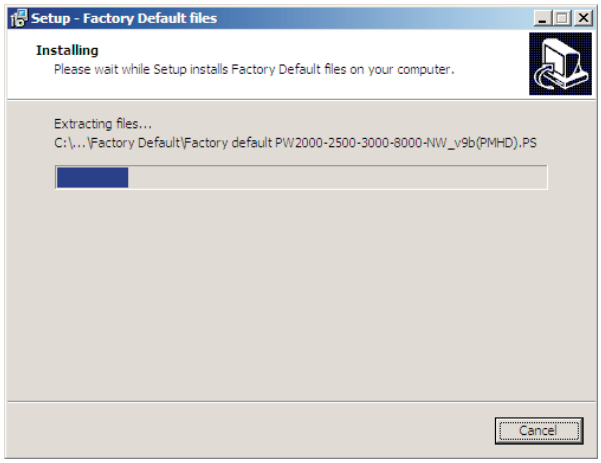
- Select **Navigator 8.3.r1** and click **Make New Folder**, name the folder **Factory Default** and click **OK**.



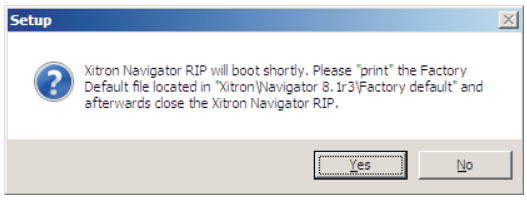
- Click **Next** to continue.


Setup - Factory Default files
Select Destination Location
Where should Factory Default files be installed?
Setup will install Factory Default files into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Xitron\Navigator 8.3r1\Factory Default
Browse...
At least 56.7 MB of free disk space is required.
Next >
Cancel

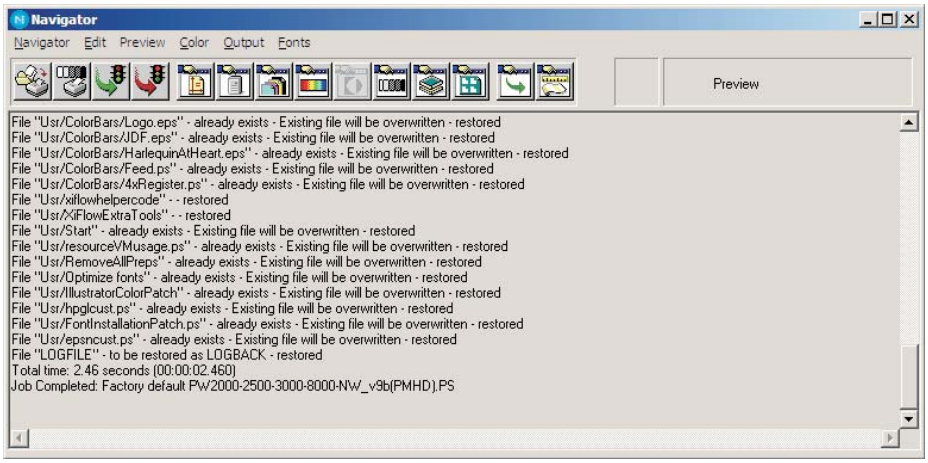
- Installation of the Factory Default files on your computer started.


Setup - Factory Default files
Installing
Please wait while Setup installs Factory Default files on your computer.
Extracting files...
C:\...\Factory Default\Factory default PW2000-2500-3000-8000-NW_v9b(PMHD).PS
Cancel

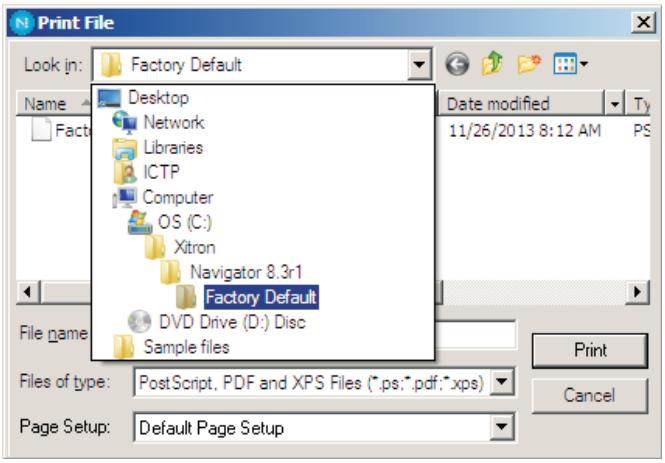
- Click **Yes** to continue.


Setup
Xitron Navigator RIP will boot shortly. Please "print" the Factory Default file located in "Xitron\Navigator 8.1r3\Factory default" and afterwards close the Xitron Navigator RIP.
Yes
No

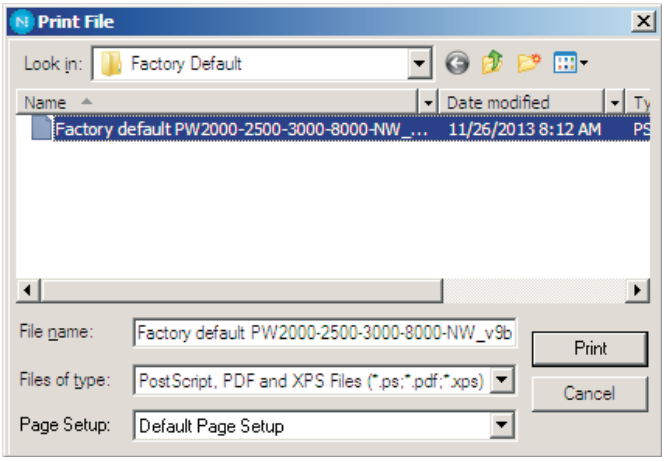
- The Navigator box will appear, click **Navigator-> Print File**.


Navigator
Navigator Edit Preview Color Output Fonts
Preview
File "Usr/ColorBars/Logo.eps" - already exists - Existing file will be overwritten - restored
File "Usr/ColorBars/JDF.eps" - already exists - Existing file will be overwritten - restored
File "Usr/ColorBars/HarlequinAtHeart.eps" - already exists - Existing file will be overwritten - restored
File "Usr/ColorBars/Feed.ps" - already exists - Existing file will be overwritten - restored
File "Usr/ColorBars/4xRegister.ps" - already exists - Existing file will be overwritten - restored
File "Usr/xiflowhelpercode" - - restored
File "Usr/XiFlowExtraTools" - - restored
File "Usr/Start" - already exists - Existing file will be overwritten - restored
File "Usr/resourceVMusage.ps" - already exists - Existing file will be overwritten - restored
File "Usr/RemoveAllPreps" - already exists - Existing file will be overwritten - restored
File "Usr/Optimize fonts" - already exists - Existing file will be overwritten - restored
File "Usr/IllustratorColorPatch" - already exists - Existing file will be overwritten - restored
File "Usr/hpglcust.ps" - already exists - Existing file will be overwritten - restored
File "Usr/FontInstallationPatch.ps" - already exists - Existing file will be overwritten - restored
File "Usr/epsncust.ps" - already exists - Existing file will be overwritten - restored
File "LOGFILE" - to be restored as LOGBACK - restored
Total time: 2.46 seconds (00:00:02.460)
Job Completed: Factory default PW2000-2500-3000-8000-NW_v9b(PMHD).PS

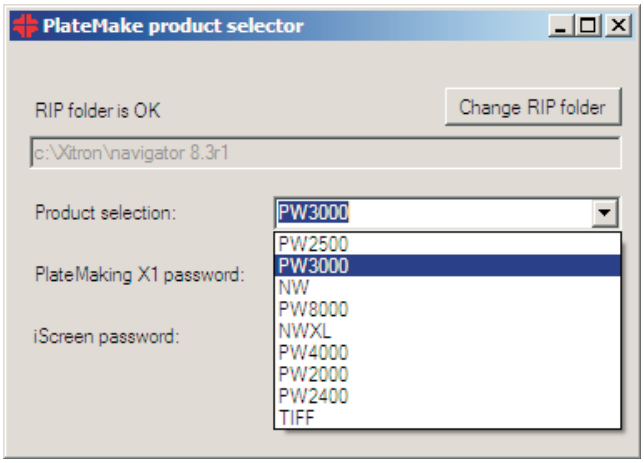
- Select Factory Default.



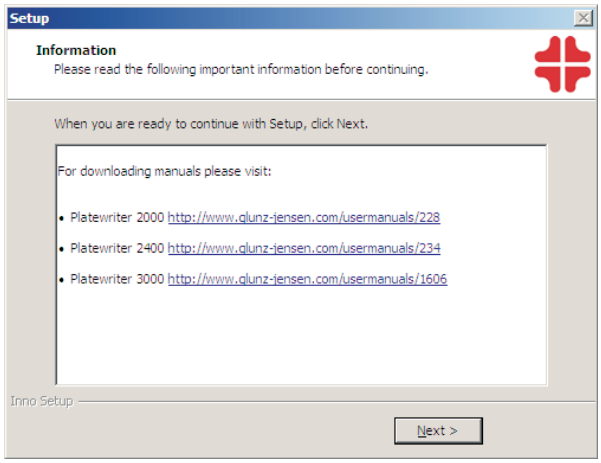
- Click **Print**.



- The PlateMake product selector box will appear, select **PW3000** and click OK.



- Click **Next** to continue.


Setup
Information
Please read the following important information before continuing.
When you are ready to continue with Setup, click Next.
For downloading manuals please visit:
• Platewriter 2000 http://www.glunz-jensen.com/usermanuals/228
• Platewriter 2400 http://www.glunz-jensen.com/usermanuals/234
• Platewriter 3000 http://www.glunz-jensen.com/usermanuals/1606
Inno Setup
Next >

- Click **Finish**.

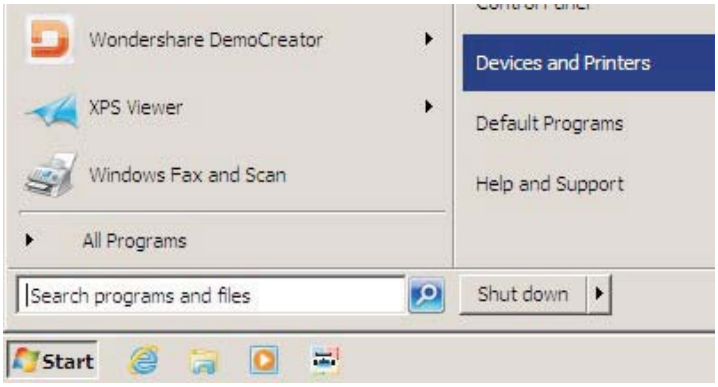
Setup
Completing the Platewriter Software Installer 2.6 Setup Wizard
Setup has finished installing Platewriter Software Installer 2.6 on your computer.
Click Finish to exit Setup.
< Back
Finish

Installation of the RIP is completed.

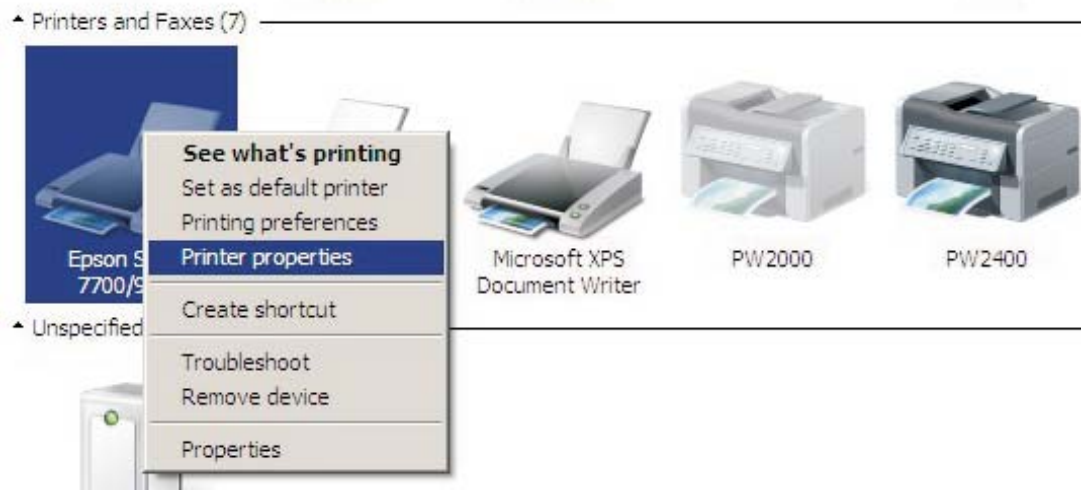
Renaming the Epson printer to PW3000/8000

For the RIP to see the PlateWriter, it is needed to rename the previously installed Epson Stylus Pro 7700/9700 printer driver to **PW2500/PW3000/PW8000/NW/NW XL**:

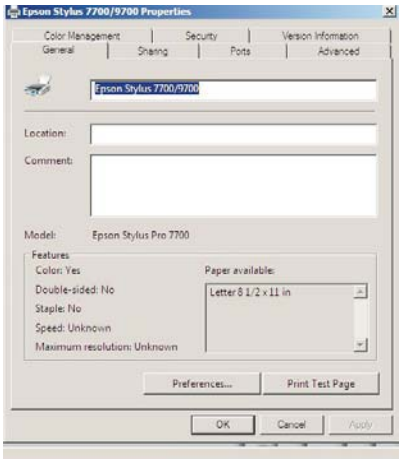
- Select the Windows **Start** button in the bottom left corner of the screen, then select **Devices** and **Printers**.



- The **Devices and Printers window will appear.**
  Right click on the Epson Stylus Pro 7700/9700 printer, and from the appearing menu select **Printer properties.**

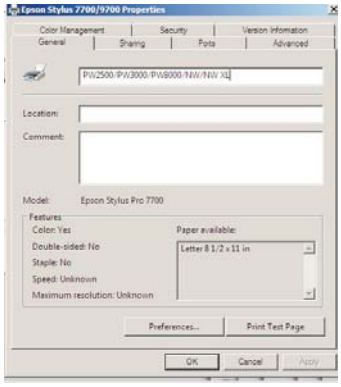


- The Epson Stylus 7700/9700 Properties window will appear.



- The printer name becomes selected, now rename the Epson Stylus Pro printer to **PW3000 or PW8000 and press Ok**.
- The printer name is changed.

Launching the RIP for the first time



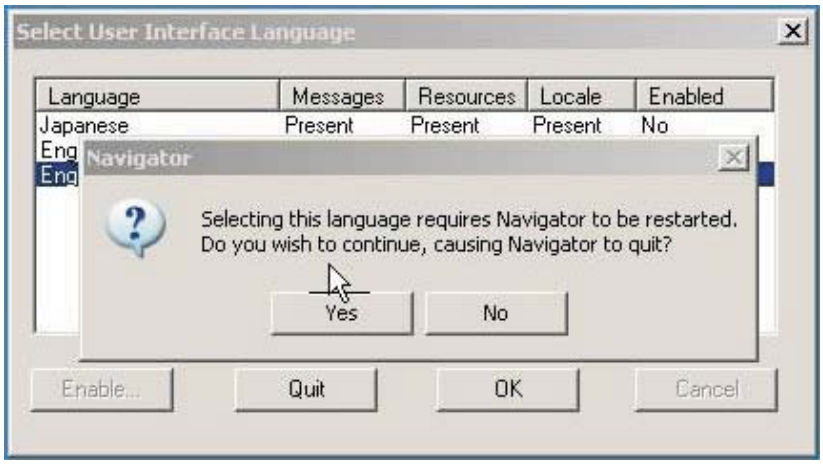
First plug in the **dongle**.

If you do not plug in the dongle, the RIP will fail to launch with a "Super Pro, C Plus Activator dongle not plugged in or invalid" error.

- Locate the **Navigator** icon which was placed on your desktop by the installer.

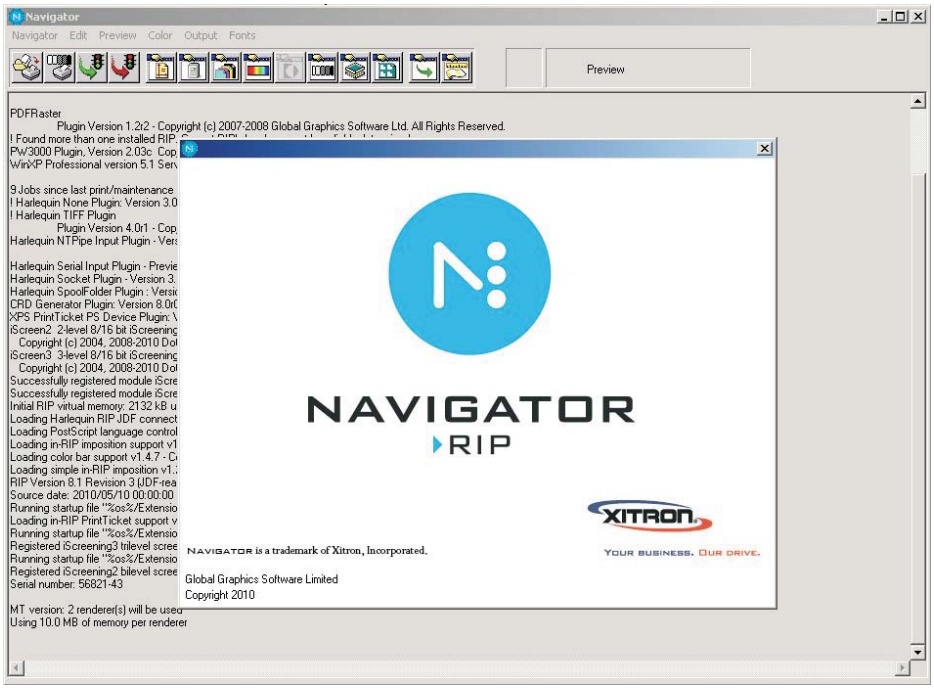
- Double-click it to launch the RIP.
- When launching the RIP for the very first time, it will ask to select **User Interface Language.**
- Select **English (United States)**. This is the keyboard map for the keyboard supplied with RIP workstation.
- When selected the **User Interface Language**, the RIP will advise that it will need to restart.

If the German user interface is installed, it can be enabled here. Choose German, click Enable, type the password and click OK.



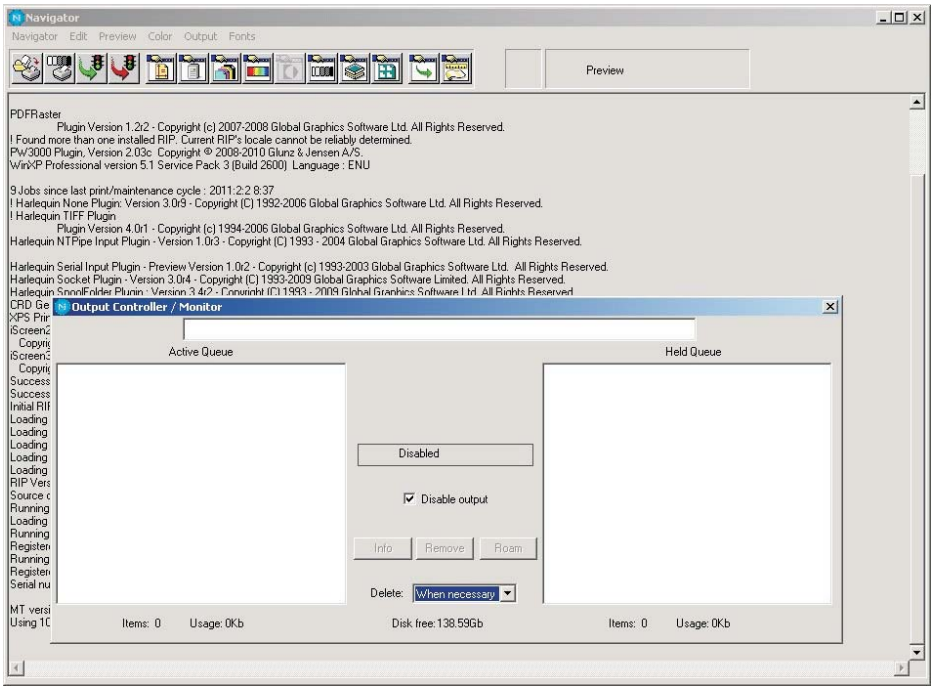
The RIP will advise that it will boot into chosen language next time.

- Click **OK** to continue and then restart the RIP.
- The very first time the RIP starts, it will automatically run a start-up configuration.



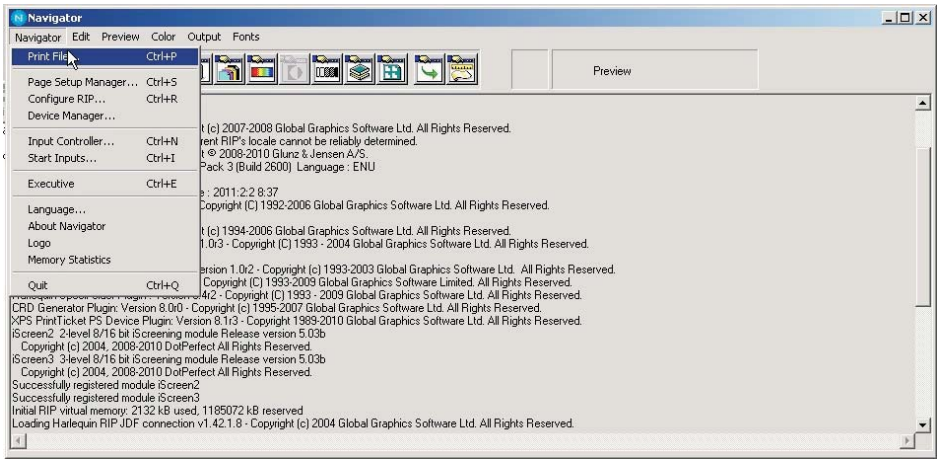
- The **Navigator** splash screen will appear, and behind it is the main screen. The main screen is called the **Throughput Window** and it displays information about the RIP, settings, jobs and the overall status.
- In the **Throughput Window** you will see how much memory the RIP has allocated, the plug-ins installed, the RIP serial number and anything else that may be installed. This can be useful information when troubleshooting (determining versions of plug-ins etc).

- Once the Splash screen has disappeared, the **Output Controller/Monitor Window** will appear (if it does not, press **Ctrl + O**).



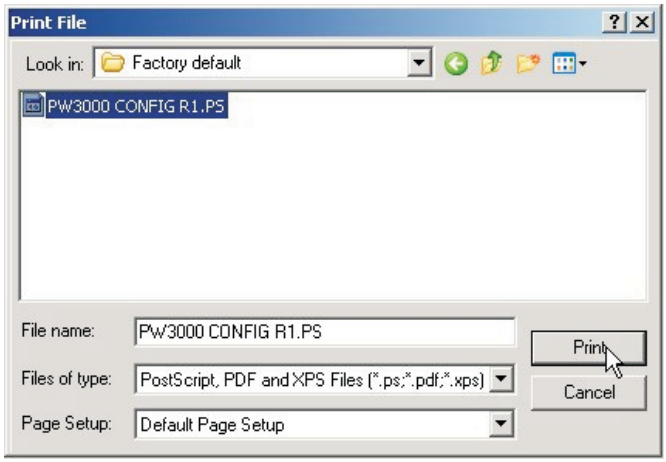
The **Output Controller/Monitor Window** shows jobs that are in the queue and jobs that have already been printed. It can be toggled On and Off by pressing the **Ctrl + O** keys. Any time you click in the background, it will disappear and you will need to toggle **Ctrl + O** to make it reappear.

- In order to reduce the time it takes to set up and configure the RIP, we have preset some settings in a file called **GJ factory default**. You will have to print this file.
- Click in the **Navigator** window to bring it to the front.



- Select **Navigator -> Print File…**
- In the **Print File** window navigate to the folder **C:\Xitron\Navigator 8.3r1\Factory default.** Double-click the folder to open it.

- Inside the **Factory default** folder...



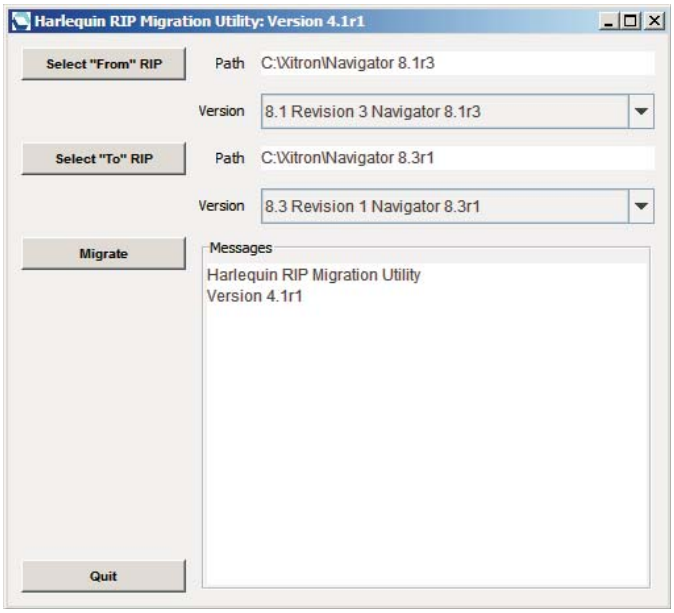
...set **Files of type** to **PostScript, PDF and XPS Files (*.ps,*.pdf,*.xps)** and **Page Setup** to **Default Page Setup**.

- Select the **GJ factory default** file and click **Print**.
- You will see text scroll down the **Throughput Window**. Once it has finished, select **Navigator -> Quit**.
- Restart **Navigator RIP**.

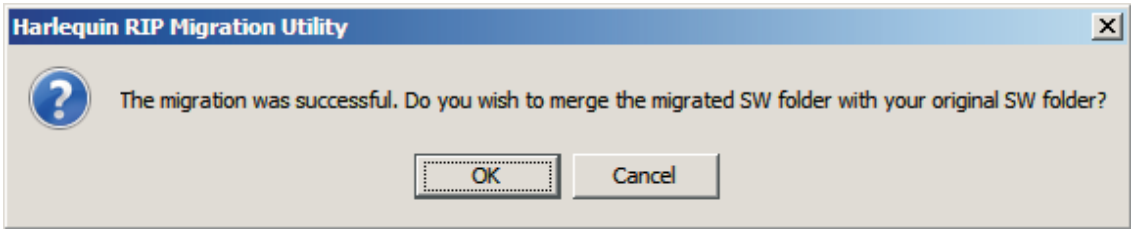
Printing the GJ factory default file sets up the RIP's Buffers, configures the Memory requirements, installs some Calibrations, Tone Curves (dot gain curves), and Page Setups for various printing press types. Also printing the file will provide most users with all the settings they need to start using the RIP immediately.

Once the RIP has restarted you will need to enter your unlock codes before you can start using the RIP.

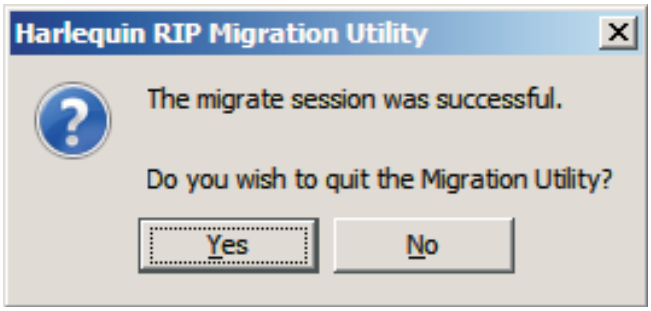
- Run file: C:\Xitron\Navigator 8.3r1\Utilities\migrate\SW_Migrate\Migrate.exe.
- Select old and new RIP and click 'Migrate'.



- Click 'OK'.


Harlequin RIP Migration Utility
The migration was successful. Do you wish to merge the migrated SW folder with your original SW folder?
OK
Cancel

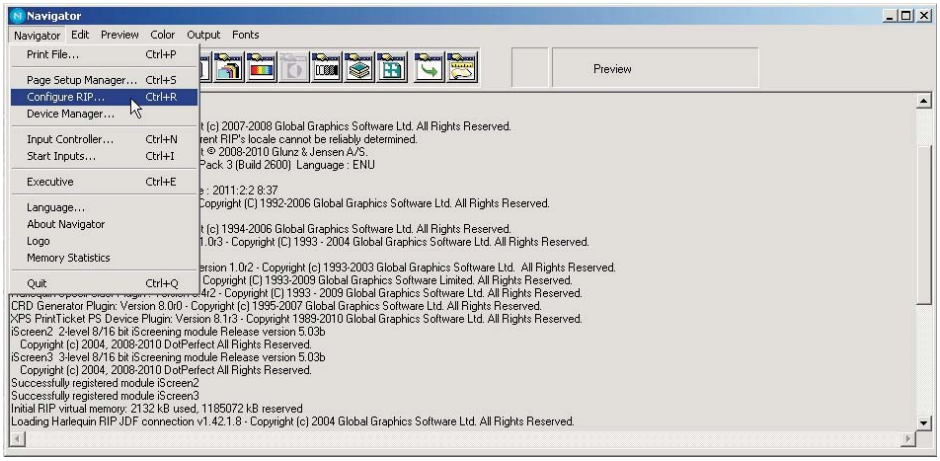
- Click 'Yes' and the transfer is completed.



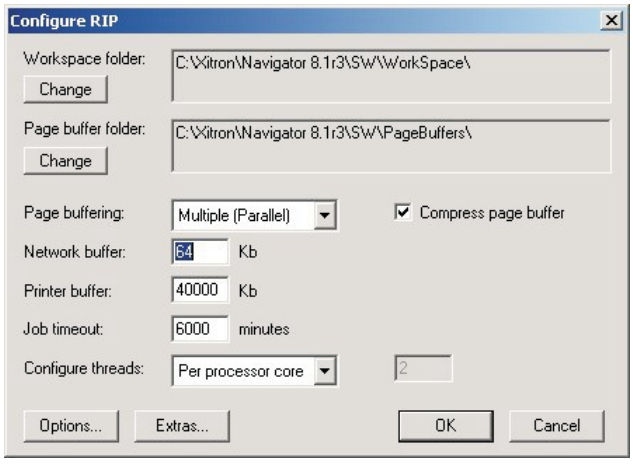
Configuring the RIP

After printing the GJ factory default file, all security unlock codes for the plug-ins will be erased.
Therefore when launching the RIP after printing the file you get several error messages. This is normal and is due to the RIP trying to activate the device for which the codes have not been entered.
The next step in configuring the RIP is to check that the buffer and memory settings have been configured correctly by the GJ factory default file, then to enter the Security Unlock codes for your devices/plug-ins and to restart the RIP one last time to activate the devices/plug-ins so that all the settings become active.

- Select **Navigator -> Configure RIP.**

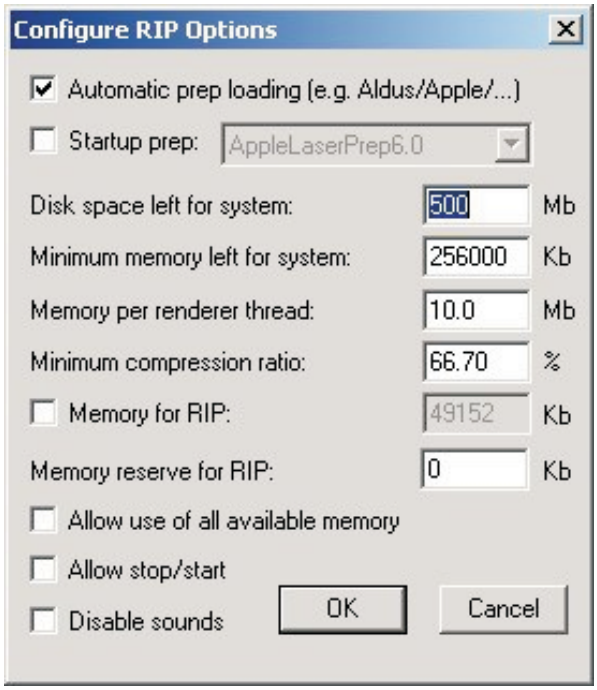

Navigator
Navigator Edit Preview Color Output Fonts
Print File... Ctrl+P
Page Setup Manager... Ctrl+S
Configure RIP... Ctrl+R
Device Manager...
Input Controller... Ctrl+N
Start Inputs... Ctrl+I
Executive Ctrl+E
Language...
About Navigator
Logo
Memory Statistics
Quit Ctrl+Q
Preview
CRD Generator Plugin: Version 8.0r0 - Copyright (c) 1995-2007 Global Graphics Software Ltd. All Rights Reserved.
XPS PrintTicket PS Device Plugin: Version 8.1r3 - Copyright 1989-2010 Global Graphics Software Ltd. All Rights Reserved.
iScreen2 2-level 8/16 bit iScreening module Release version 5.03b
Copyright (c) 2004, 2008-2010 DotPerfect All Rights Reserved.
iScreen3 3-level 8/16 bit iScreening module Release version 5.03b
Copyright (c) 2004, 2008-2010 DotPerfect All Rights Reserved.
Successfully registered module iScreen2
Successfully registered module iScreen3
Initial RIP virtual memory: 2132 KB used, 1185072 kB reserved
Loading Harlequin RIP JDF connection v1.42.1.8 - Copyright (c) 2004 Global Graphics Software Ltd. All Rights Reserved.

- This opens the **Configure RIP** dialog.



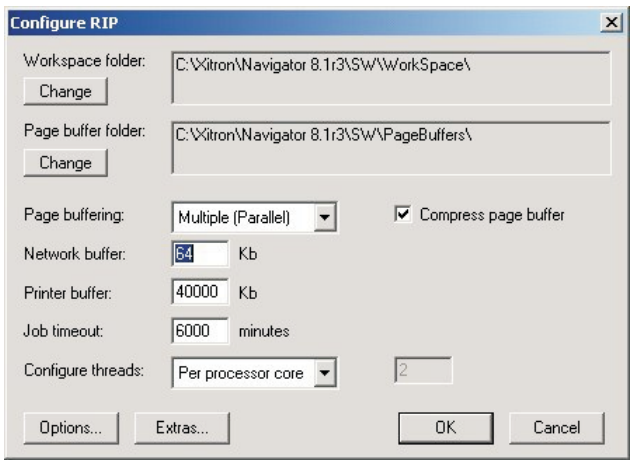
Set **Page buffering** to **Multiple (Parallel)**.
Set **Network buffer** to **64**.
Set **Printer buffer** to **40000**.
Click on **Options**.

- This opens the **Configure RIP Options** dialog.

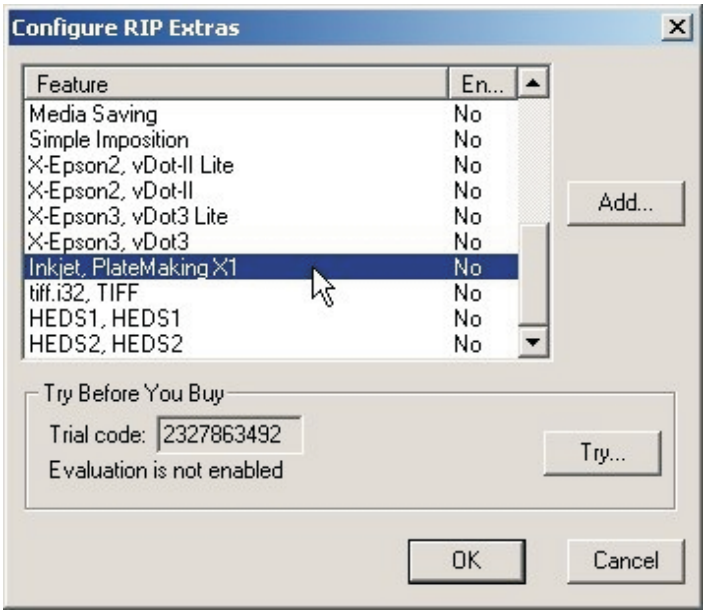


Set **Disk space left for system** to **500**.
Set **Minimum memory left for system** to **256,000**.
Click on **OK** to return to **Configure RIP** dialog.

- Click **Extras…**

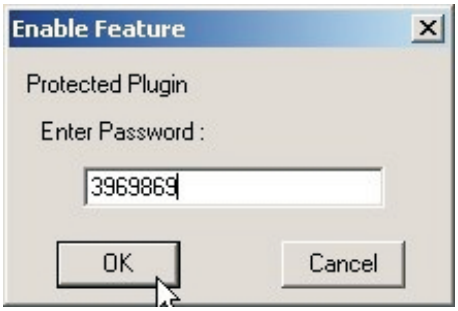


- This opens the **Configure RIP Extras** dialog.



There are a number of passwords supplied with your system, not all are entered here. If you purchased the optional **Proofing** function or **CIP3**, these passwords will be added separately later. For now you will need to enter the passwords for the Inkjet, PlateMakingX1 and for any other devices you purchased unlock codes for.

- Start by selecting the Inkjet, PlateMakingX1 item and click **Add...**
  Enter the corresponding password and click **OK**.



Repeat the procedure for any other features/devices you have codes for such as trapping or imposition.

- Finally click **OK** in the **Configure RIP Extras** and the **Configure RIP** dialog boxes to save these changes.
- Select **Navigator -> Quit** to exit the RIP.
- All of the configurations and passwords have been saved.
- Restart the RIP to activate changes and unlock codes.

Activating the color proofing option

The **iCtP System** supports **Epson color proofing** by default. You will need to type in the activation codes for this option.

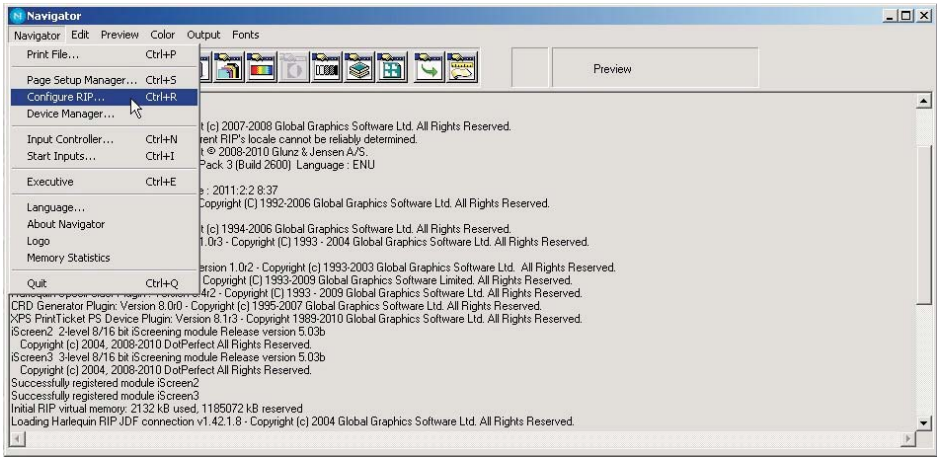
There are three main Epson color printers that can be activated:

- **Epson 4880**
- **Epson 7880**
- **Epson 9880**

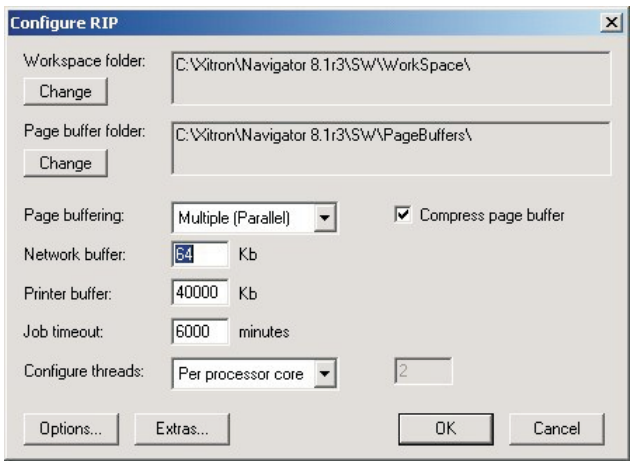
You should follow the instruction for activating the appropriate printer for the Epson that you have. You can purchase additional codes for activating other devices from Epson or other manufacturers, such as Epson 4800, 7800 and 9800.

Epson proofing activation

- Select **Navigator -> Configure RIP**.

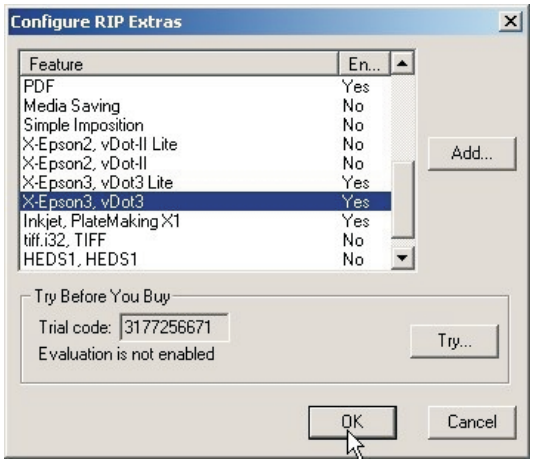

Navigator
Navigator Edit Preview Color Output Fonts
Print File... Ctrl+P
Page Setup Manager... Ctrl+S
Configure RIP... Ctrl+R
Device Manager...
Input Controller... Ctrl+N
Start Inputs... Ctrl+I
Executive Ctrl+E
Language...
About Navigator
Logo
Memory Statistics
Quit Ctrl+Q
Preview
CRD Generator Plugin: Version 8.0r0 - Copyright (c) 1995-2007 Global Graphics Software Ltd. All Rights Reserved.
XPS PrintTicket PS Device Plugin: Version 8.1r3 - Copyright 1989-2010 Global Graphics Software Ltd. All Rights Reserved.
iScreen2 2-level 8/16 bit iScreening module Release version 5.03b
Copyright (c) 2004, 2009-2010 DotPerfect All Rights Reserved.
iScreen3 3-level 8/16 bit iScreening module Release version 5.03b
Copyright (c) 2004, 2008-2010 DotPerfect All Rights Reserved.
Successfully registered module iScreen2
Successfully registered module iScreen3
Initial RIP virtual memory: 2132 kB used, 1185072 kB reserved
Loading Harlequin RIP JDF connection v1.42.1.8 - Copyright (c) 2004 Global Graphics Software Ltd. All Rights Reserved.

- This opens the **Configure RIP** dialog.

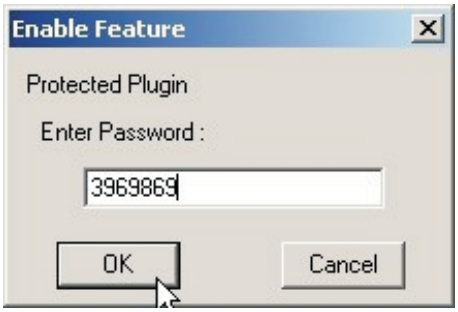


Click **Extras…**

- This opens the **Configure RIP Extras** dialog.

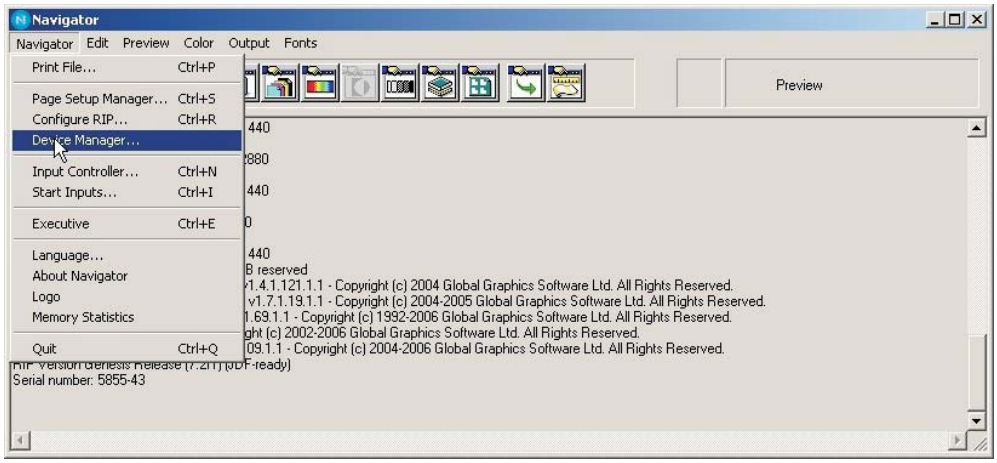


- Scroll down the list of features to the iCtP device **X-Epson3, vDot-3**. Click **Add...**
- Enter the **X-Epson3, vDot-3** activation code and click **OK**.

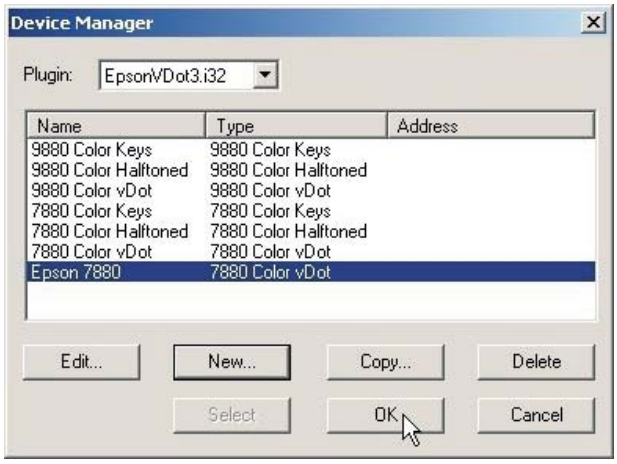


- Then click **Add** for activation of **X-Epson3**, **vDot-3 Lite**. Enter the **X-Epson3**, **vDot-3 Lite** activation code and click **OK**.
- Finally click **OK** in the **Configure RIP Extras** and the **Configure RIP** dialog boxes to save these changes.
- Select **Navigator -> Quit** to exit the RIP.
  All configurations and passwords have been saved, but the process has not been completed - see next page!

- Restart the RIP, then choose **Navigator -> Device Manager**.

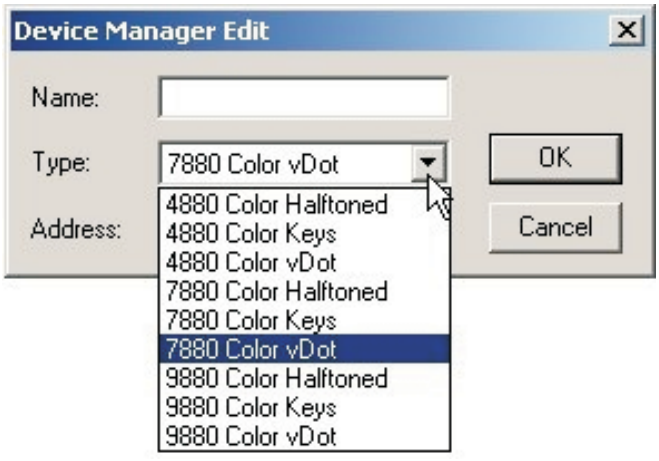


- The **Device Manager** dialogue appears. If you previously have entered the passwords correctly for **X-Epson3**, **vDot-3** and **Epson3**, **vDot-3 Lite**, you will see this list appear when choosing **Epson-vDot-II.i32** as plug-in.

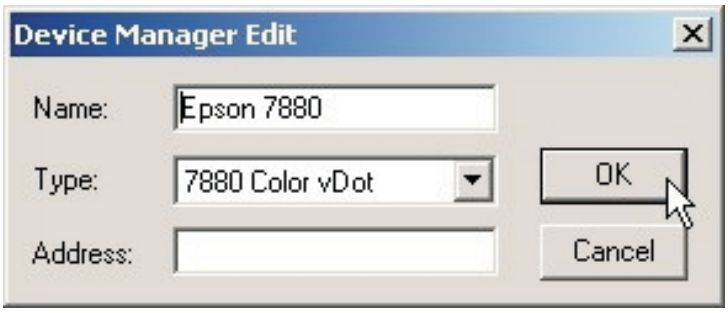


Click on **New...**

- The **Device Manager Edit** window will appear.

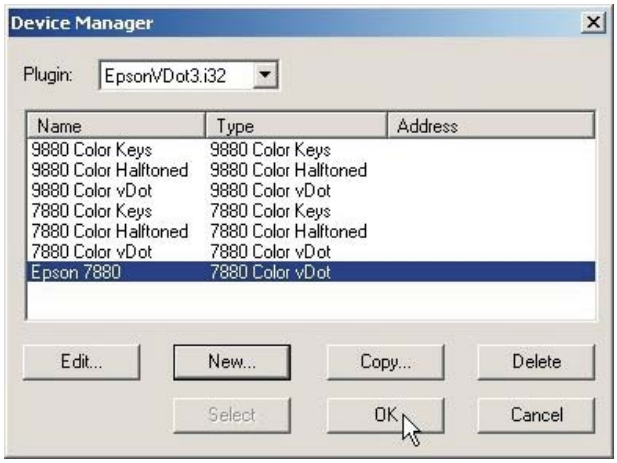


- In the **Type** drop-down menu you should see the Epson devices.
- Select **4880 Color vDot** or **7880 Color vDot** or **9880 Color vDot**, depending on which proofing device you want to add.
- Enter a name for the device.

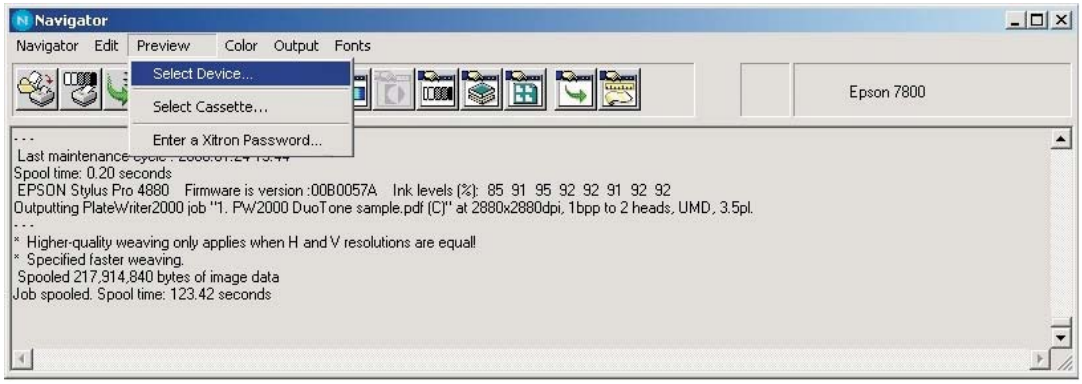


We recommend that you use a name that clearly identifies the device, e.g. **Epson 7800 Color vDot**.

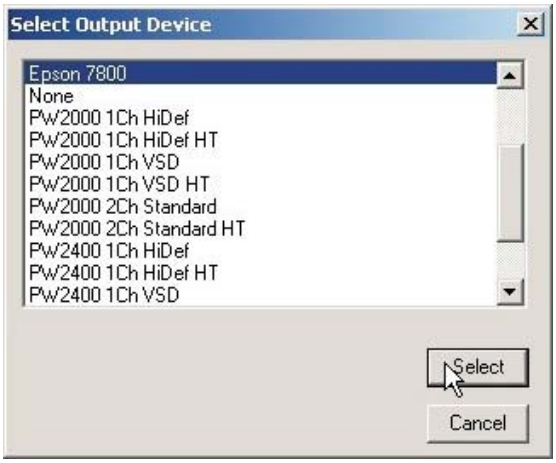
- Leave the **Address** field blank.
- Click **OK**.
- Now the **Device Manager** list will show the new device you have added.
- If you have added the device correctly, click **OK** to continue. The device is now added and ready to be selected in the Page Setup menu. The individual settings for the device can be configured here.



- Configuring other devices than Epson 4880, 7880 and 9880 may require adding additional codes. This is for example the case with Epson 4800, 7800 and 9800. Here you select the menu **Preview -> Select Device**.

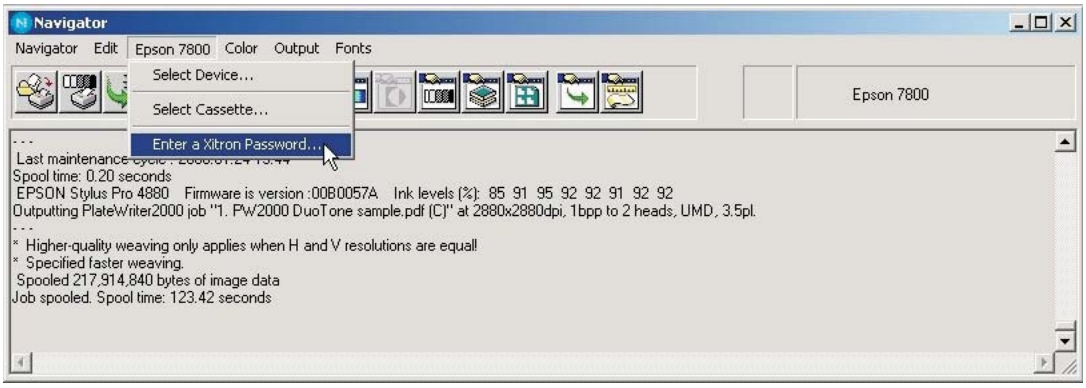

Navigator
Navigator Edit Preview Color Output Fonts
Select Device...
Select Cassette...
Enter a Xitron Password...
Epson 7800
Spool time: 0.20 seconds
EPSON Stylus Pro 4880 Firmware is version :00B0057A Ink levels (%): 85 91 95 92 92 91 92 92
Outputting PlateWriter2000 job "1. PW2000 DuoTone sample.pdf (C)" at 2880x2880dpi, 1bpp to 2 heads, UMD, 3.5pl.
* Higher-quality weaving only applies when H and V resolutions are equal!
* Specified faster weaving.
Spooled 217,914,840 bytes of image data
Job spooled. Spool time: 123.42 seconds

- The **Select Output Device** window appears.



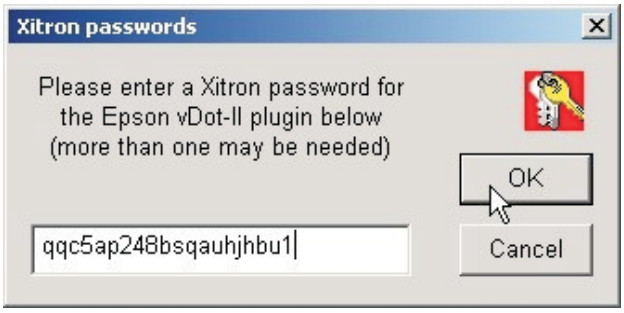
Select the device and choose **Select**. This is an Epson 7800, which was added from the Device Manager after installing the Epson vDot-2 plug-in. You will see the additional Epson 7800 you just added.

- You can now select the device and then enter password.
- In the top menu bar you will see the item **Preview** has been replaced by **Epson 7800**.

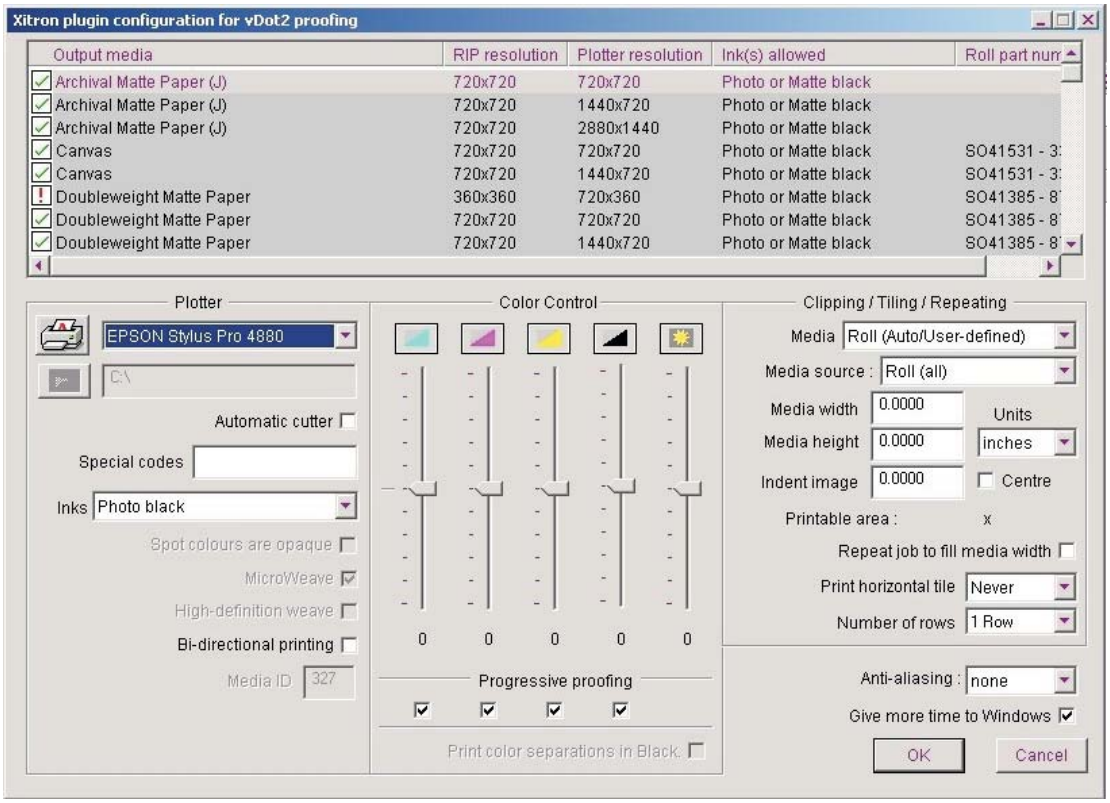

Navigator
Navigator Edit Epson 7800 Color Output Fonts
Select Device...
Select Cassette...
Enter a Xitron Password...
Epson 7800
Spool time: 0.20 seconds
EPSON Stylus Pro 4880 Firmware is version :00B0057A Ink levels (%): 85 91 95 92 92 91 92 92
Outputting PlateWriter2000 job "1. PW2000 DuoTone sample.pdf (C)" at 2880x2880dpi, 1bpp to 2 heads, UMD, 3.5pl.
* Higher-quality weaving only applies when H and V resolutions are equal!
* Specified faster weaving.
Spooled 217,914,840 bytes of image data
Job spooled. Spool time: 123.42 seconds

Select this menu item and from the drop-down menu select **Enter a Xitron Password...**

- Enter the second password you were given for **X-Epson2**, **vDot-2** and **vDot-2 Lite** for the **Epson 7800**. Click **OK**. Your Epson 7800 is now enabled.


Xitron passwords
Please enter a Xitron password for the Epson vDot-II plugin below (more than one may be needed)
qqc5ap248bsqauhjhbu1
OK
Cancel

- The **Epson2**, **vDot-2 Lite** passwords will be used for the **Epson 4800** series and the **X-Epson2**, **vDot-2** will be used for larger format Epson printers.


Xitron plugin configuration for vDot2 proofing
Output media
RIP resolution
Plotter resolution
Ink(s) allowed
Roll part num
Archival Matte Paper (J) 720x720 720x720 Photo or Matte black
Archival Matte Paper (J) 720x720 1440x720 Photo or Matte black
Archival Matte Paper (J) 720x720 2880x1440 Photo or Matte black
Canvas 720x720 720x720 Photo or Matte black SO41531 - 3
Canvas 720x720 1440x720 Photo or Matte black SO41531 - 3
Doubleweight Matte Paper 360x360 720x360 Photo or Matte black SO41385 - 8
Doubleweight Matte Paper 720x720 720x720 Photo or Matte black SO41385 - 8
Doubleweight Matte Paper 720x720 1440x720 Photo or Matte black SO41385 - 8
Plotter
EPSON Stylus Pro 4880
C:\
Automatic cutter
Special codes
Inks Photo black
Spot colours are opaque
MicroWeave
High-definition weave
Bi-directional printing
Media ID 327
Color Control
0 0 0 0 0
Progressive proofing
Print color separations in Black
Clipping / Tiling / Repeating
Media Roll (Auto/User-defined)
Media source : Roll (all)
Media width 0.0000
Media height 0.0000
Units inches
Indent image 0.0000
Centre
Printable area : x
Repeat job to fill media width
Print horizontal tile Never
Number of rows 1 Row
Anti-aliasing : none
Give more time to Windows
OK
Cancel

You have now completed the RIP installation. Please refer to the Operating Manual for information about creation of Page Setups and Print Queues.

Part 5: Trouble shooting

General

If the iCtP system does not work properly, refer to the following pages to find the paragraph that comes closest to your problem.

For cleaning and maintenance subjects see the iCtP system **User's Manual**.

The electrical diagrams are located in Appendix of this manual.

To change a fuse, switch off all power to the processor first.
Always ensure that the new fuse is of the correct rating according to the diagram.

Before starting troubleshooting

IMPORTANT

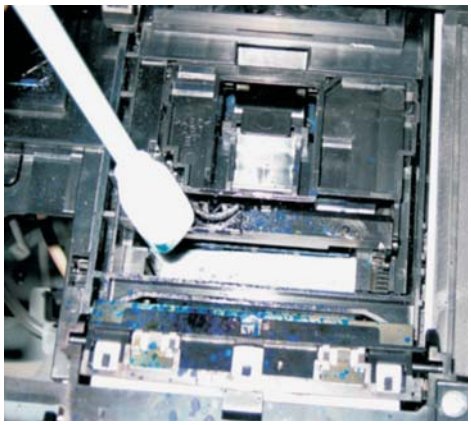
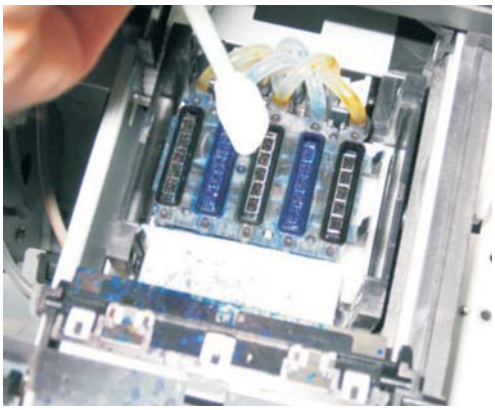
Plates and finisher solution are very sensitive materials and correct storage is vital to obtain a satisfactory production result. Incorrect storage may very well result in unsatisfactory processing quality etc.

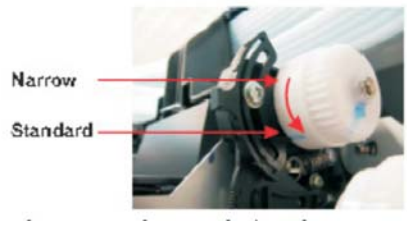
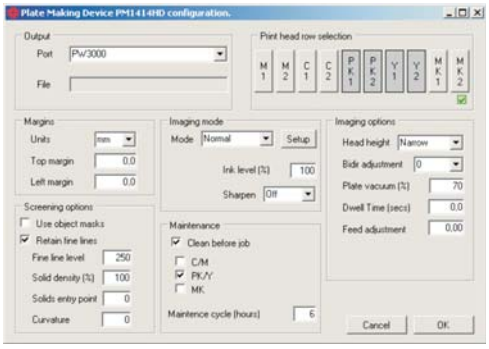
Contact your local supplier for information about storage requirements for plates and finisher solution. Before making adjustments of the equipment make sure that incorrect storage of plates and finisher solution can be excluded.

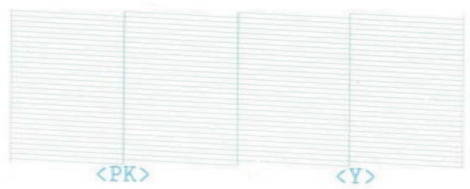
IF a nozzle test shows a drop out of nozzles in either one or several rows, it is important first to establish the possible cause of the nozzle loss. It could be inflicted by several situations such as:

Problem	Possible cause for the error
Random nozzle loss	Lack of cleaning or maintenance. Pump Cap assy malfunction or wear.
Head crash	Plate hit the head and damage the surface on print head.
Nozzles Clogged	Head left uncapped for several hours. iCtP system not used for prolonged period, i.e. months. Pump Cap assy malfunction or wear.
Nozzles fluids starvation	Stand still over night and weekend, normally cured by a single clean. Dampers in selector unit contaminated. Upgrade from original formula Liquid Dot to new High Density Liquid Dot with insignificant cleaning procedure or use incorrect version of Liquid Dot. If any of the above cases marked is the situation then a head replacement should include a Selector Unit replacement.

Step	What to do	
1	Make a Nozzle check and see if all nozzles are present and that the lines are not broken. Go to **Menu**->**Test print**->**Nozzle check**->**Print**.	
2	If one or more lines are broken, perform a normal clean in pairs. Go to **Menu**->**Maintenance**->**Cleaning**->**Clean color pairs**->**Y/PK**->**Execute**.	
3	Perform nozzle test again and evaluate the result. If improvement go to **Step 4**. If no improvement by cleaning go to **Step 9**.	
4	Continue the cleaning with the CL3 in Serviceman mode. It saves fluids compared to the power clean. Go to **Serviceman menu**->**Maintenance**->**Cleaning**->**CL3**->**Y/PK**->**Execute**.	
5	Perform the nozzle test again and evaluate the result.	
6	If the reslut is ok as on the picture, then the Printer is ready for setting jobs.	
7	If the result is not ok, and still "gaining" lines jump back to **Step 4** and perform CL3 again.	
8	If no improvement by CL3 cleaning, go to **Step 9**.	
9	Dismount the Pump Cap assy.	
10	Gently clean the rim of the print head with the cleaning fluid and the cleaning stick.	
11	Control print head for the surface damage. **If visual scratches on surface because of the mechanical damages, change the print head.**	
12	Mount the Pump Cap assy again. Perform a CL1 clean from the Serviceman menu and perform a Nozzle test. If the result is not ok, continue to **Step 13**.	

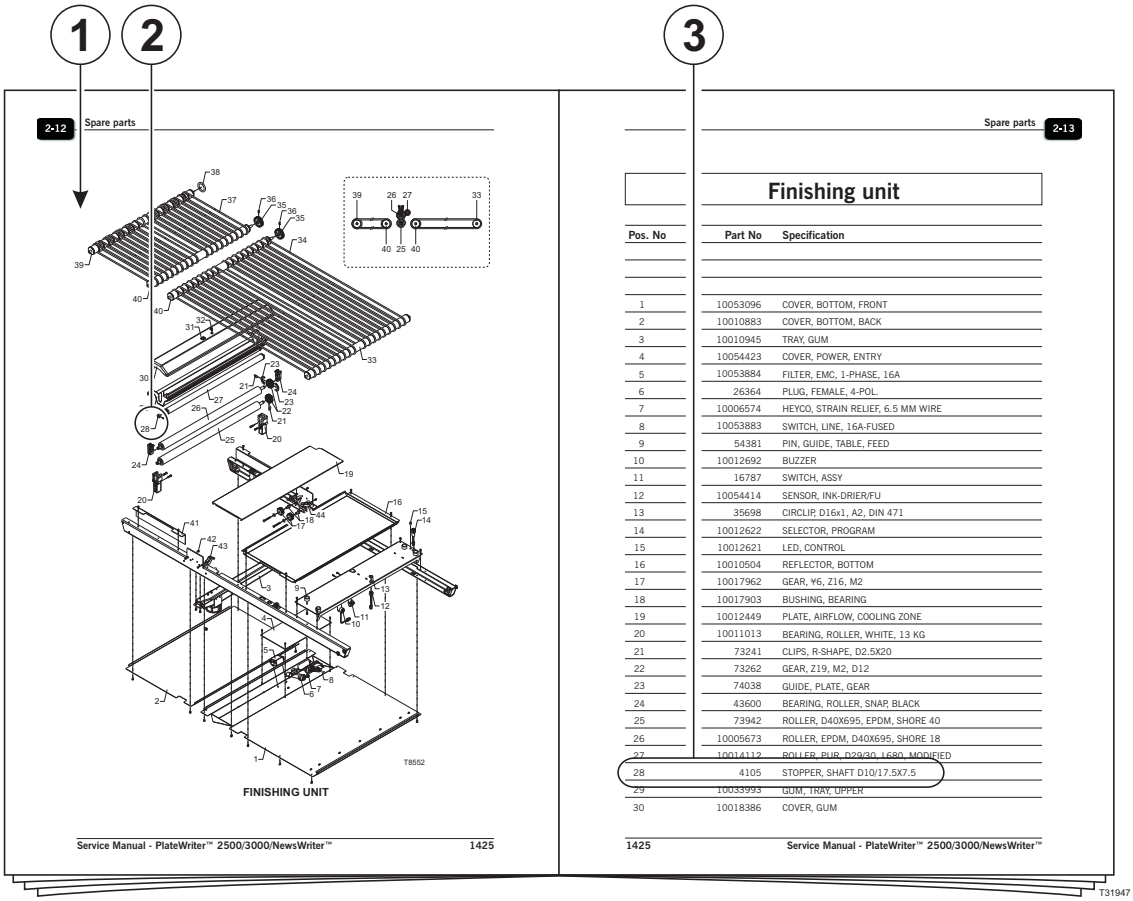
13	If the Pump Cap assy has been maintained weekly, then jump to the **Step 18**. If the Pump Cap assy has not been maintained, then jump to the **Step 14**.	
14	Make a weekly cleaning according to the manual 10055648 current revision chapters 3-5 or watch the maintenance video. Go to **Serviceman menu**->**Maintenance**->**Sequence**->**Ok**.	
15	Clean the Wiper with the cleaning stick.	
16	Clean the Head Cap seal with the cleaning stick.	
17	After cleaning jump to the next step.	
18	Test of the pump. Take out the LD cassettes and weight the cassettes.	
19	Make the CL3 Clean -LD current channels, then remove and weight the LD cassettes again and each cassette should now have lost at least 12-17 grams. If less than 10 grams are consumed per CL3 clean, then the ink head may be clogged or the Pump Cap assy may be malfunctioning. If not, Pump Cap assy is likely not to be at least working and need to be replaced. Other possibilities can be bad cassette/inside valve.	
20	If above mentioned steps are done and Nozzle test still not ok, continue to **Step 21**.	

21	Perform Y/PK CL3 clean from the Serviceman menu. When the cleaning starts, turn the Head Height Cam to Narrow mode (9 o'clock). Caps are closer to the print head during the cleaning process. Perform a Nozzle test and evaluate the result.	
22	If still not ok: Dismount the selector unit. Clean it with the cleaning fluid dampers and clean the connection pipe with the cleaning stick. Mount the selector unit again.	
23	Perform a Y/PK CL3 clean from the Serviceman menu. During the cleaning cycles head park, squeeze the selector unit together with the head as shown on the picture. **Only when it is pumping!**	
24	If above mentioned steps are done and a Nozzle test is still not ok, continue to the **Step 25** for changing the rows in the print head.	
25	Make sure that the correct version of the RIP (and Output Plug-in) is installed as on the picture. Change the print head row selection according to the manual 10055648 current revison chapters 4-1 Using the RIP.	

26	Change and weight the LD cassettes and charge LD in the new selected channels with a CL4 clean. Weight LD cassettes again and each cassette should now have lost at least 17-20 grams. Perform a Nozzle test. If no nozzles, perform another CL4 cleaning. If the result is ok as on the picture, then the Printer is ready for the job. Here showed PK-Y, it could also be M-C, MK-M, MK-C, etc. If the result is not ok, and all steps are done, then the Printer is defect and you have to continue to **Step 27**.	
27	Fill out the print head warranty claim form from the DVD 10072489 current revision and return the print head to G&J according to the instructions in the form.	

Part 6a: Spare parts for PW3000

Finding a spare part


1
2
3
2-12 Spare parts
FINISHING UNIT
T8552
Service Manual - PlateWriter™ 2500/3000/NewsWriter™ 1425
Spare parts 2-13
Finishing unit
Pos. No Part No Specification
1 10053096 COVER, BOTTOM, FRONT
2 10010883 COVER, BOTTOM, BACK
3 10010945 TRAY, GUM
4 10054423 COVER, POWER, ENTRY
5 10053884 FILTER, EMC, 1-PHASE, 16A
6 26364 PLUG, FEMALE, 4-POL.
7 10006574 HEYCO, STRAIN RELIEF, 6.5 MM WIRE
8 10053883 SWITCH, LINE, 16A-FUSED
9 54381 PIN, GUIDE, TABLE, FEED
10 10012692 BUZZER
11 16787 SWITCH, ASSY
12 10054414 SENSOR, INK-DRIER/FU
13 35698 CIRCLIP, D16x1, A2, DIN 471
14 10012622 SELECTOR, PROGRAM
15 10012621 LED, CONTROL
16 10010504 REFLECTOR, BOTTOM
17 10017962 GEAR, ¥6, Z16, M2
18 10017903 BUSHING, BEARING
19 10012449 PLATE, AIRFLOW, COOLING ZONE
20 10011013 BEARING, ROLLER, WHITE, 13 KG
21 73241 CLIPS, R-SHAPE, D2.5X20
22 73262 GEAR, Z19, M2, D12
23 74038 GUIDE, PLATE, GEAR
24 43600 BEARING, ROLLER, SNAP, BLACK
25 73942 ROLLER, D40X695, EPDM, SHORE 40
26 10005673 ROLLER, EPDM, D40X695, SHORE 18
27 10014112 ROLLER, PUR, D29/30, L680, MODIFIED
28 4105 STOPPER, SHAFT D10/17.5X7.5
29 10033993 GUM, TRAY, UPPER
30 10018386 COVER, GUM
1425 Service Manual - PlateWriter™ 2500/3000/NewsWriter™
T31947

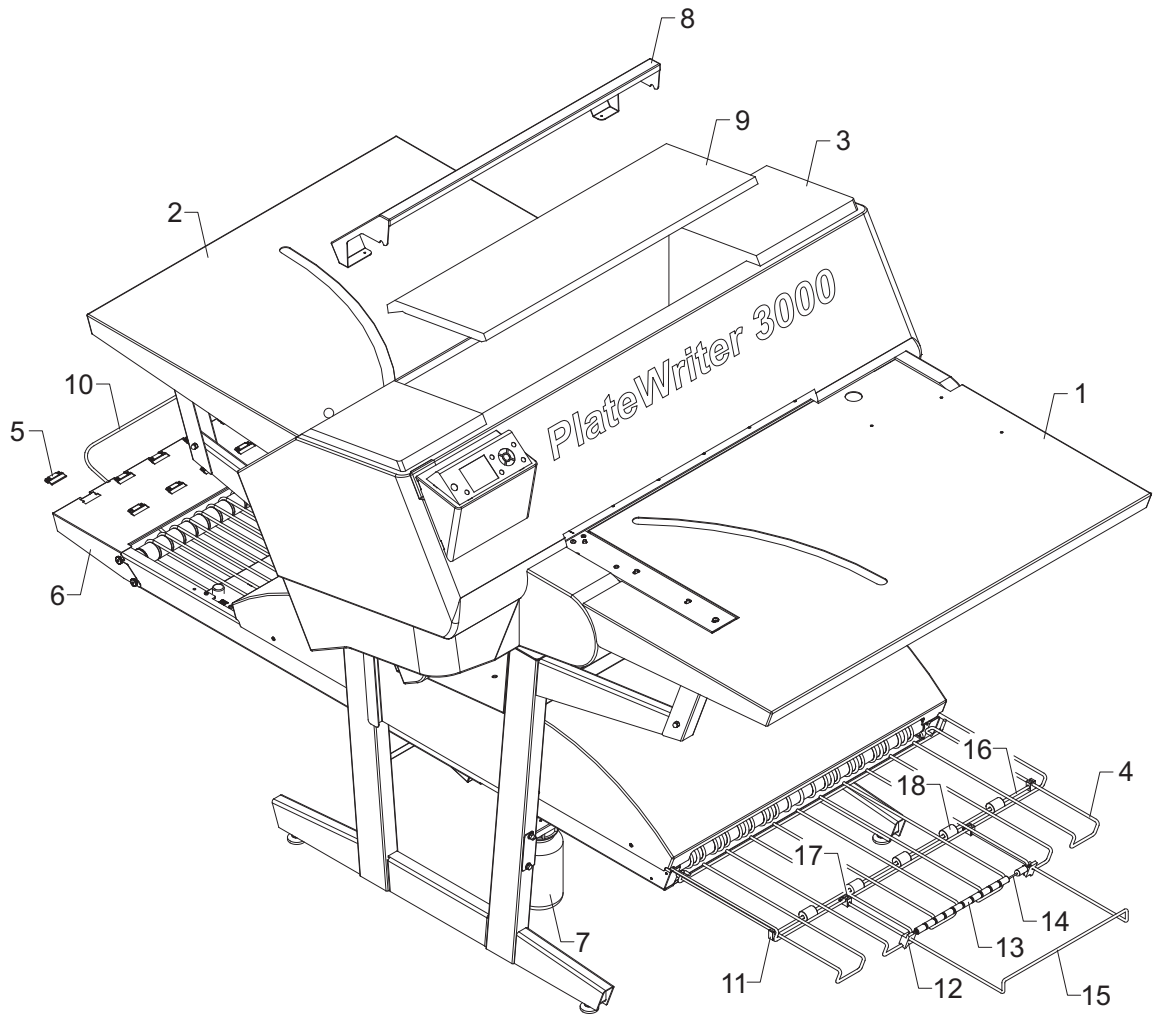
1. Find the pages covering the section where the part is located.
2. Find the specific part and the part's Pos. No. on the drawing.
3. Refer to the list on the opposite page to find the spare part's number and specification.

Ordering a spare part

When ordering spare parts please state carefully the spare part number, the part specification and the number of items wanted and send the order to your spare parts dealer. The cables and their part numbers can be found in the electrical diagrams placed in the end of this manual.

Original printer spare parts

To obtain the correct order number for original printer spare parts please use the "Imaging Unit" Service manual to find the part number for the part you need, then use the **Cross reference list** in this manual to find the corresponding spare part number to use when ordering the part.



TOTAL MACHINE

T8900

Total machine

Pos. No	Part No	Specification
1	10057926	TABLE, INPUT
2	10050219	TABLE, EXIT
3	10062344	PRINTER, COMPLETE
	10050310	PRINTER, COMPLETE, PLATEWRITER 3000
4	10011838	TRAY, EXIT
5	87571	ROLLER, WITH HOLDER
6	10060967	EXTENSION, FINISHER, SHORT, COMPLETE
7	10010948	CONTAINER, 1L
8	10059268	COVER, EXIT, PRINTER
9	10060780	LID, TOP
10	10060964	TUBE, EXTENSION, FINISHER, SHORT
11	10061176	BRACKET, EXTENSION, TRAY, EXIT
12	10060978	BRACKET, EXTENSION, TRAY, EXIT
13	73245	ROLLER, D13/D3.3 x 25.5
14	10061168	SHAFT, EXTENSION, TRAY, EXIT, SHORT
15	10060980	TUBE, EXTENSION, TRAY, EXIT
16	10061177	SHAFT, EXTENSION, TRAY, EXIT, LONG
17	10060976	BRACKET, EXTENSION, TRAY, EXIT
18	10061175	ROLLER, EXTENSION, FINISHER, EXIT
19		
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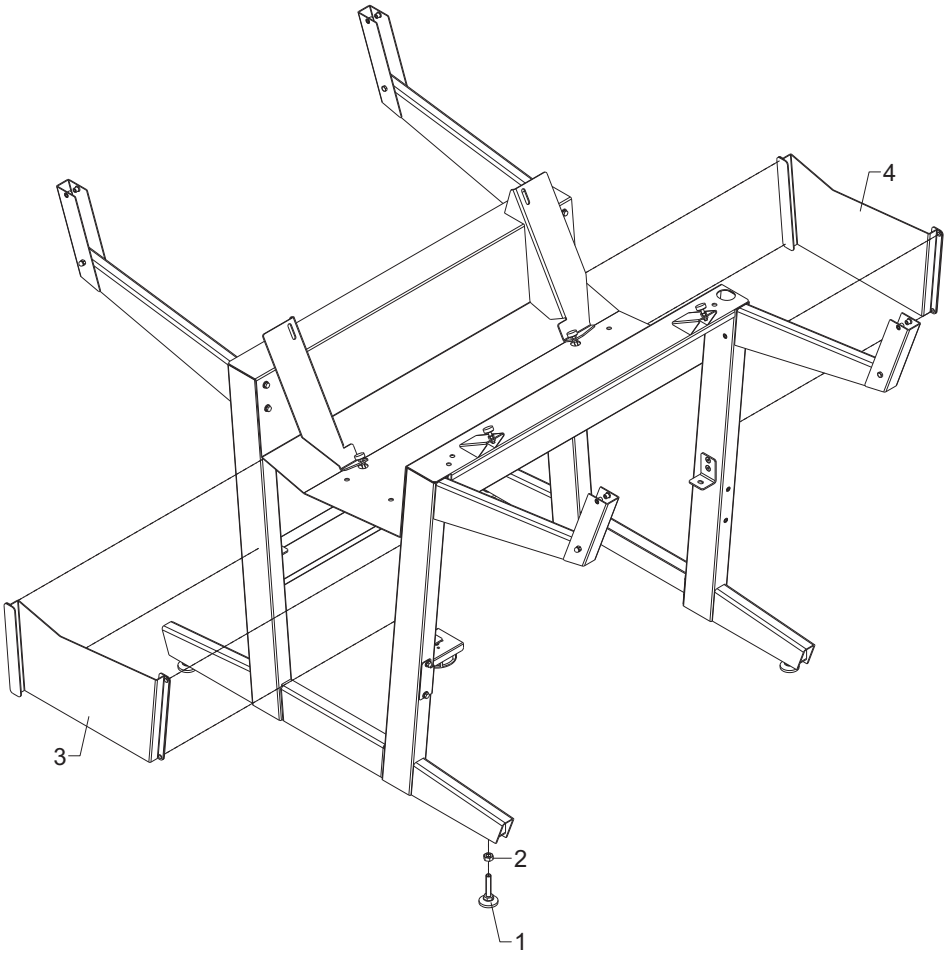
28		
29		



STAND

T8803

Stand

Pos. No	Part No	Specification
1	0011841	LEG, ADJUSTABLE, M10 x 50
2	1504	NUT, M10
3	10062347	SIDECOVER, LEFT/RIGHT
3	10050232	SIDECOVER, LEFT, PLATEWRITER 3000
4	10050227	SIDECOVER, RIGHT, PLATEWRITER 3000
5		
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12		
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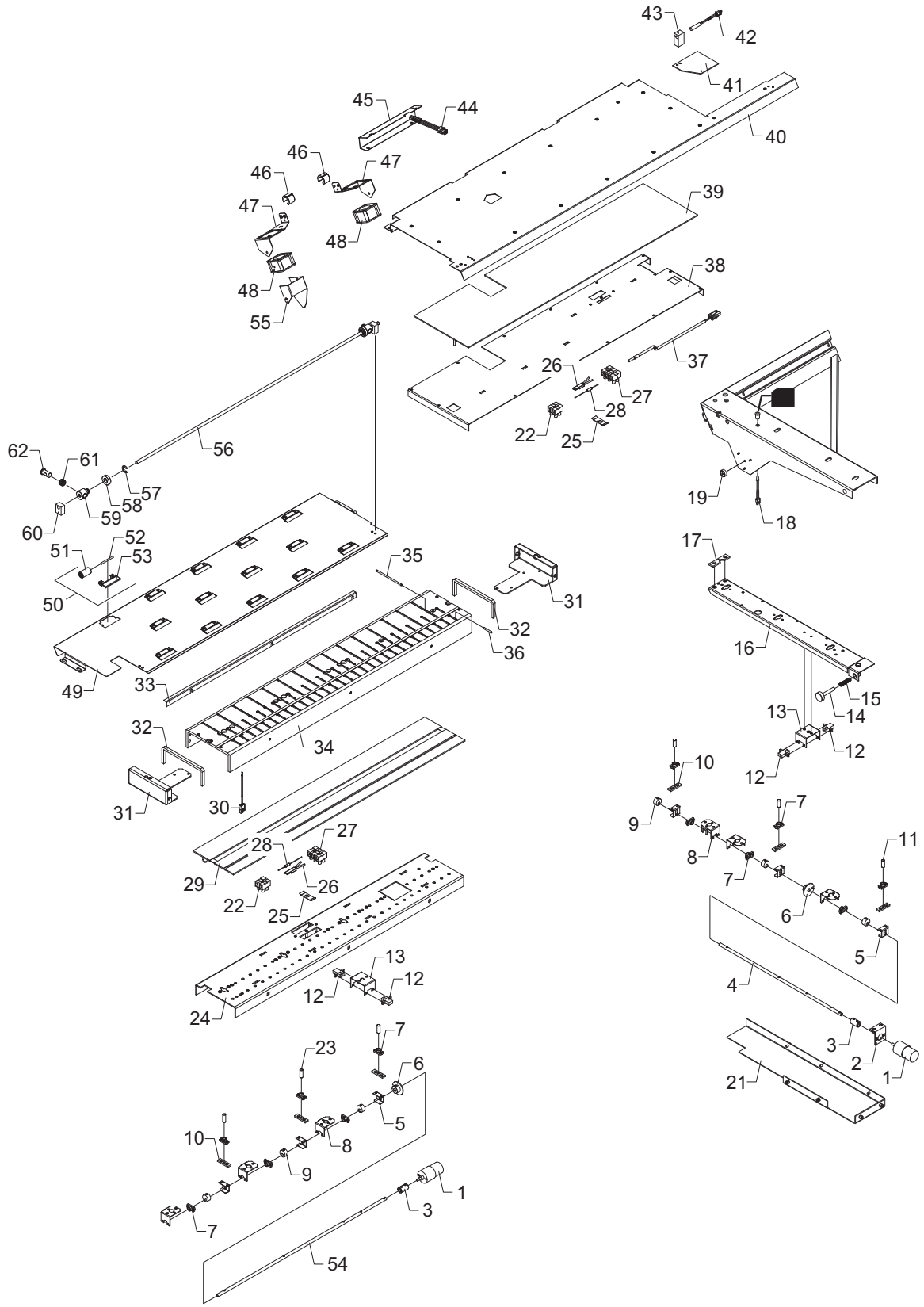

REGISTRATION SYSTEM, PRINT BED AND HEATER

T8905

Registration system, print bed and heater

Pos. No	Part No	Specification
1	10057728	MOTOR, 24V DC, GEAR
2	10057744	BRACKET, MOTOR
3	10061035	BUSHING, SHAFT, REGISTER
4	10058299	SHAFT, SIDE, REGISTER
5	10060970	LIFTER, REGISTER
6	10058234	PLASTIC, DISC
7	10061031	BUSHING, REGISTER
8	10061033	BRACKET, REGISTER
9	10057826	CAM, FRONT, REGISTER
10	10060971	HOLDER, PIN
11	10061034	PIN, REGISTER, L=16MM
12	10009707	SENSOR, OPTICAL
13	10061040	BRACKET, SENSOR, REGISTER
14	10046530	FINGER-SCREW, M6 x 35
15	10058535	SPRING, D6 x 30
16	10058414	HOLDER, SIDE REGISTER
17	10058421	PLATE, DISTANCE, SIDE REGISTER
18	10058401	LED, CONTROL, 5MM, 3 COLOUR, REGISTRATION
19	10058419	BUSHING, Ø15 x 5
20	10012027	LED, HOLDER
21	10058651	COVER, SIDE REGISTER
22	6262	TERMINAL, 2 CONNECTIONS
23	10061032	PIN, REGISTER, L=18MM
24	10059886	BRACKET, FRONT REGISTER/HEATER
25	10059894	CLAMP, OVERHEAT
26	10060725	SWITCH, THERMAL, 60°C
27	6263	TERMINAL, 3 CONNECTIONS
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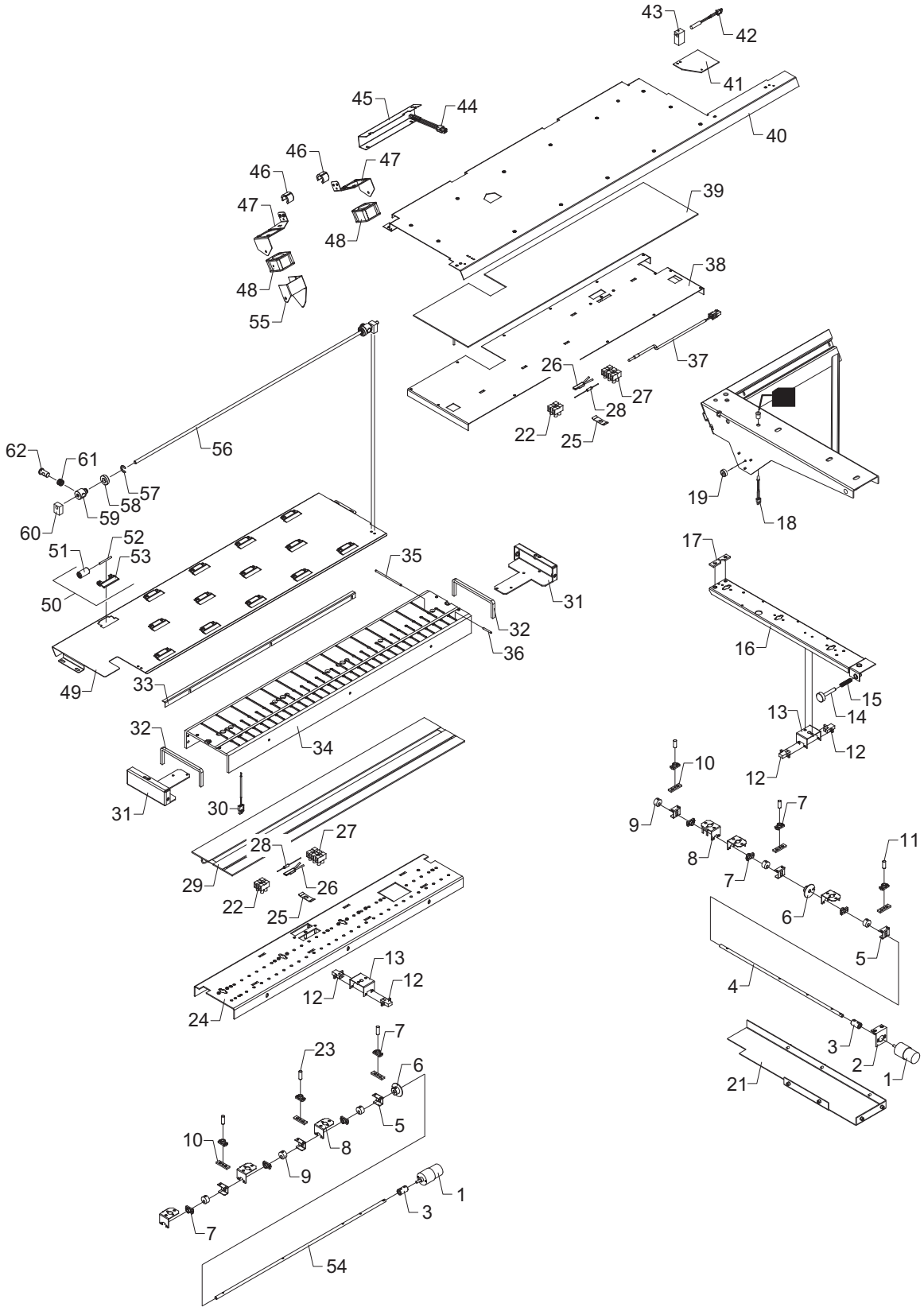

REGISTRATION SYSTEM, PRINT BED AND HEATER

T8905

Registration system, print bed and heater

Pos. No	Part No	Specification
28	10060726	FUSE, THERMAL, 84°C, ONE SHOT
29	10060781	HEATER, 115 x 660, 300W, OHS-60/84°C, COMPLETE
30	10048832	SENSOR, TEMPERATURE, PT-100, WITH PLUG
31	10059885	BEARING, SIDE, PROFIL
32	10059889	FOAM, 4 x 8 x 195
33	10059895	SUPPORT, GUIDE, EXIT
34	10059882	PROFIL, HEATER, PRINT BED
35	10060799	INLAY, STRIP, LONG
36	10060800	INLAY, STRIP, SHORT
37	10059768	SENSOR, TEMPERATURE, THERMISTOR, PLASTIC
38	10059764	PLATE, HEATER
39	10059754	HEATER
40	10059755	PLATE, HEATER
41	10058148	BRACKET, SENSOR
42	10059688	SENSOR, REED, L=300MM
43	10057724	HOLDER, SENSORS
44	10012688	SENSOR, REFLECTIVE
45	10059896	BRACKET, SENSOR, PRINT HEAD
46	10051045	BUSHING, OPEN, SLIDE, HEAD, PRINTER
47	10061043	BRACKET, BLOWER, PRINT HEAD
48	10061592	FAN, WITH CONNECTOR
49	10059893	EXIT, GUIDE, PRINTER, COMPLETE
50	87571	ROLLER, WITH HOLDER
51	73245	ROLLER, D13/D3.3 x 25.5
52	35907	SHAFT, ROLLER, D3, L=33
53	53916	HOLDER, ROLLER, GUIDE
54	10057642	SHAFT, FRONT, REGISTER
55	10061619	PLATE, REFLECTOR, AIR
56	10063589	SHAFT, EXIT, WHEEL, GUIDE
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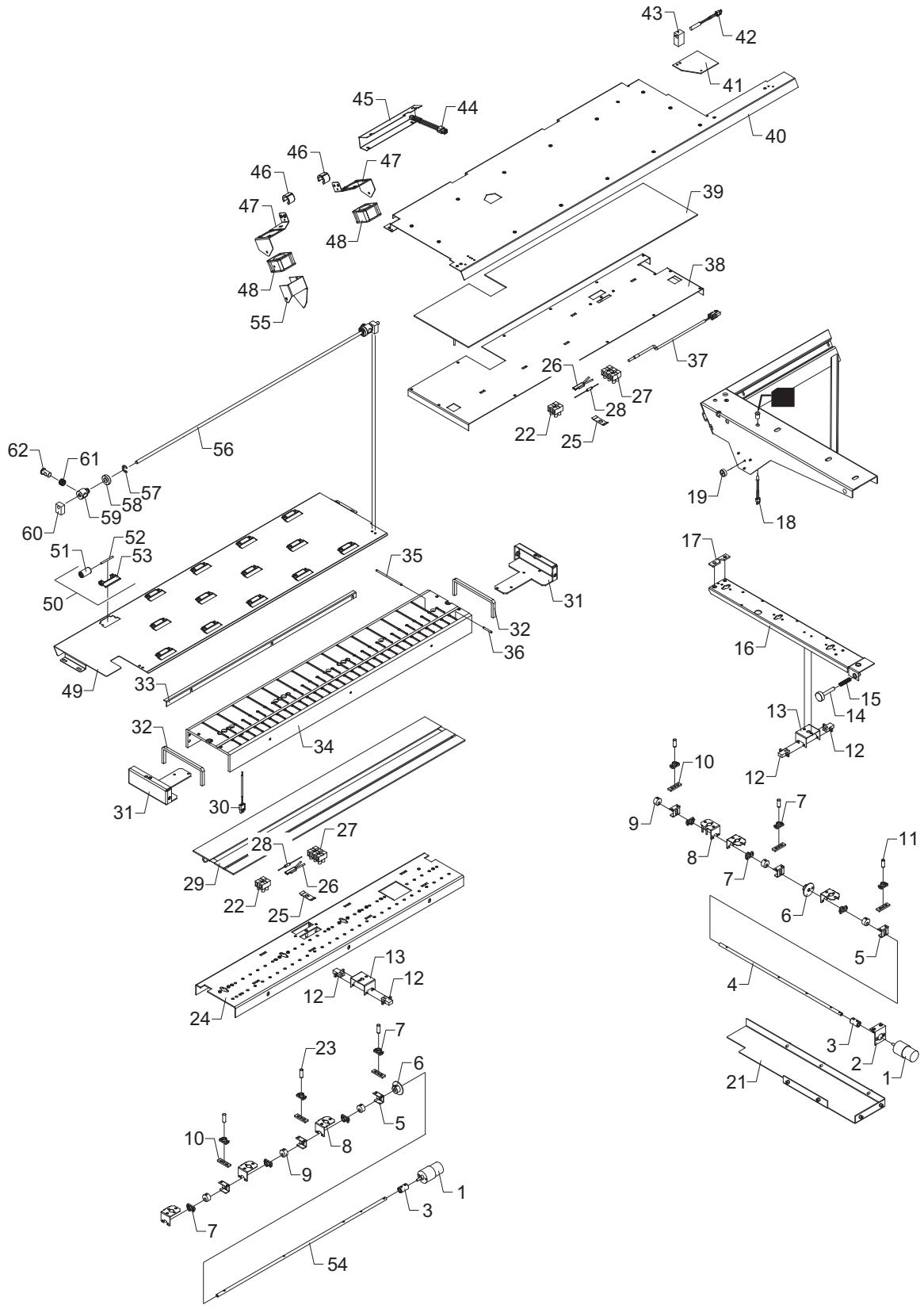

REGISTRATION SYSTEM, PRINT BED AND HEATER

T8905

Registration system, print bed and heater

Pos. No	Part No	Specification
57	35320	CIRCLIP, D8 x 16.3
58	10063583	WHEEL, D20/d10-B5, POM
59	10063584	HOLDER, ROLLER, EXIT, WHEEL, GUIDE
60	10063585	HOLDER, SHAFT, EXIT, WHEEL, GUIDE
61	10063587	SPRING, Ø10/ø1 x 15
62	10063586	BREAK, EXIT, WHEEL, GUIDE
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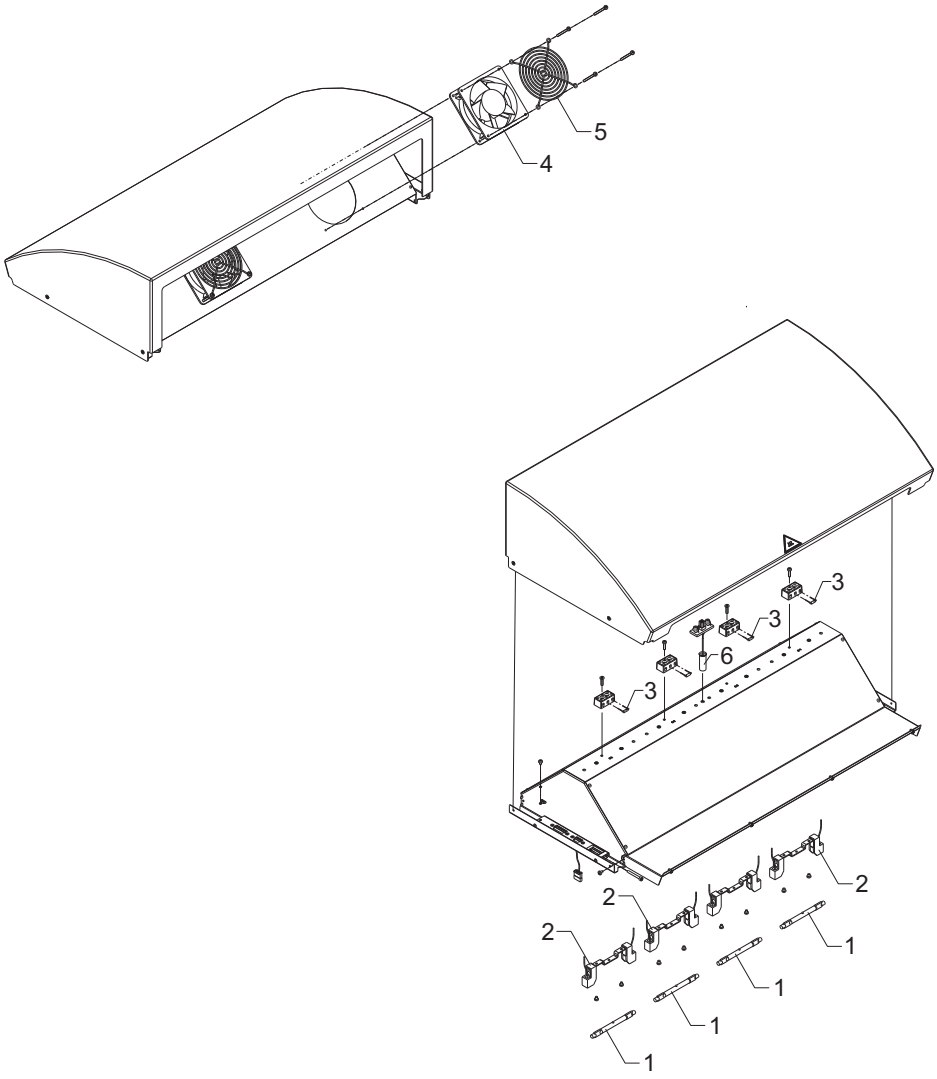

DRYER & CURING

T8804

Dryer & curing

Pos. No	Part No	Specification
1	10010359	BULB, HALOGEN, 500W, 240V
2	10010361	SOCKET, HALOGENLAMP
3	10012598	FUSE, THERMAL, 184°C
4	26054	FAN, SUNON
5	10019245	GUARD, METAL, FAN, (FG-12), 120 x 120
6	10053094	TEMPERATURE, SENSOR, CURRING UNIT
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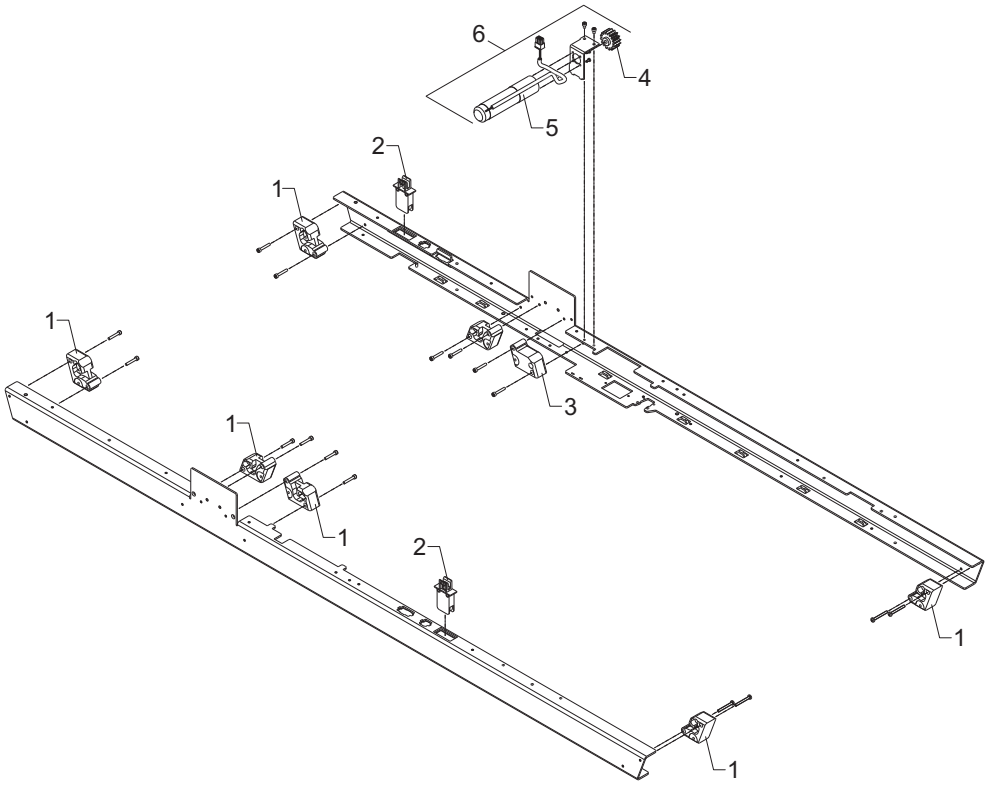

SIDE MEMBERS

T8551

Side members

Pos. No	Part No	Specification
1	10010560	BLOCK, BEARING, GEAR
2	16864	SWITCH, LID, 2 CONT.
3	10024329	BLOCK, BEARING, GEAR
4	10034526	GEAR, Z16, M2
5	10054787	MOTOR, DUNKER
6	10054788	MOTOR, DRIVE, WITH GEAR
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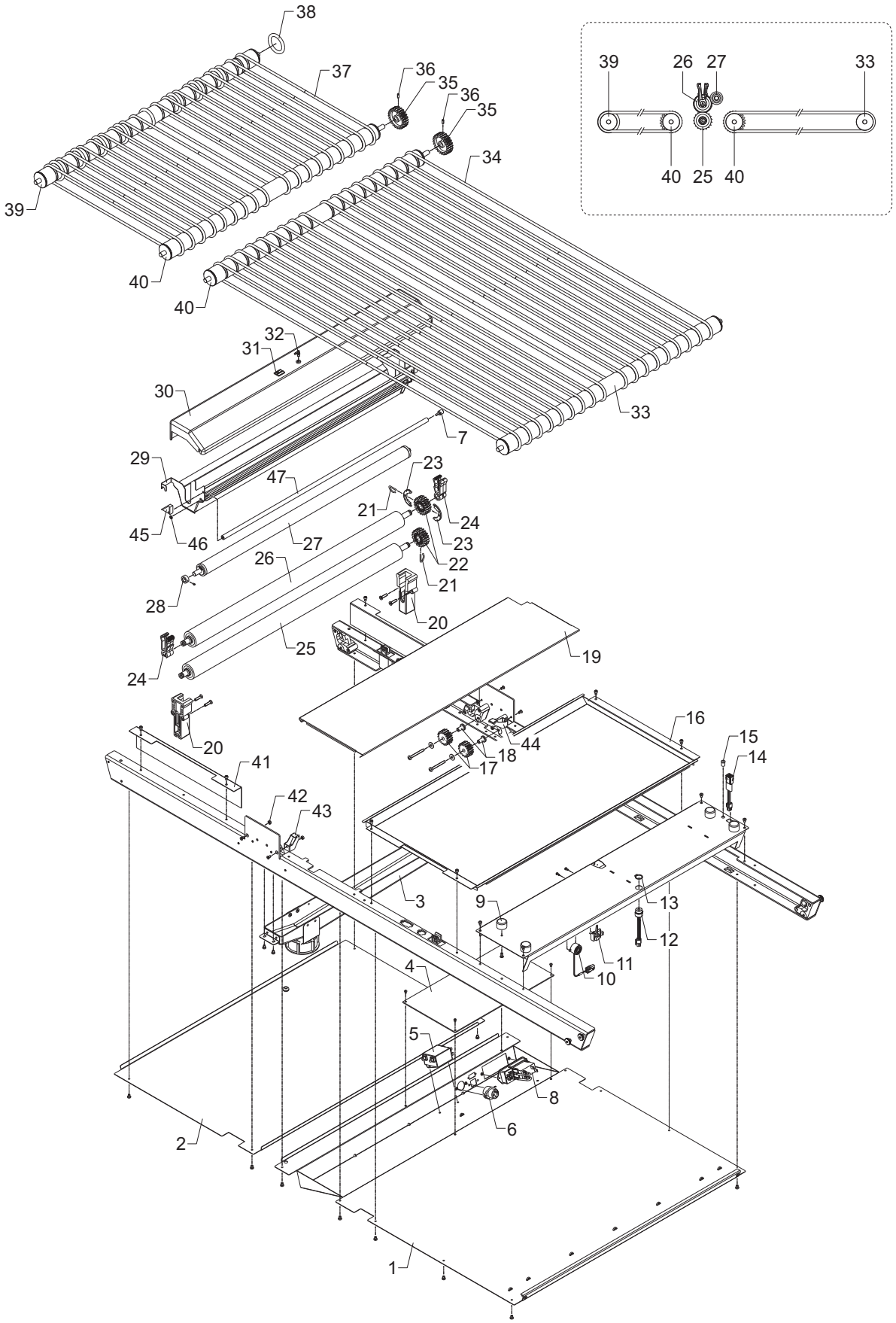
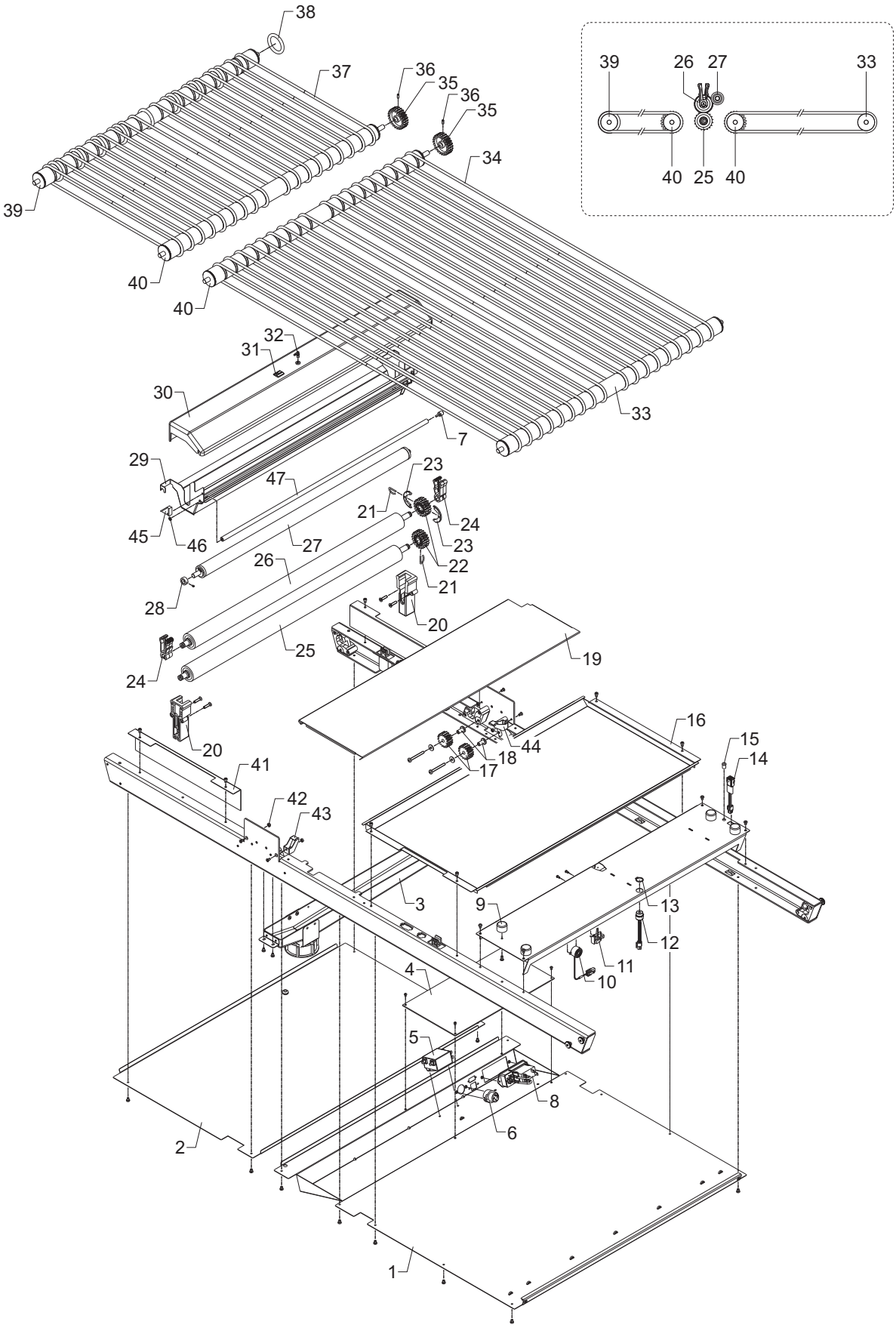


FINISHING UNIT

T8552

Finishing unit

Pos. No	Part No	Specification
1	10053096	COVER, BOTTOM, FRONT
2	10010883	COVER, BOTTOM, BACK
3	10010945	TRAY, GUM
4	10054423	COVER, POWER, ENTRY
5	10053884	FILTER, EMC, 1-PHASE, 16A
6	26364	PLUG, FEMALE, 4-POLE
7	10059559	SHAFT, GUM, SHORT
8	10053883	SWITCH, LINE, 16A-FUSED
9	54381	PIN, GUIDE, TABLE, FEED
10	10012692	BUZZER
11	16787	SWITCH, ASSY
12	10054414	SENSOR, INK-DRIER/FU
13	35698	CIRCLIP, D16 x 1, A2, DIN 471
14	10012622	SELECTOR, PROGRAM
15	10012621	LED, CONTROL
16	10010504	REFLECTOR, BOTTOM
17	10017962	GEAR, ¥6, Z16, M2
18	10017903	BUSHING, BEARING
19	10012449	PLATE, AIRFLOW, COOLING ZONE
20	10011013	BEARING, ROLLER, WHITE, 13 KG
21	73241	CLIPS, R-SHAPE, D2.5 x 20
22	73262	GEAR, Z19, M2, D12
23	74038	GUIDE, PLATE, GEAR
24	43600	BEARING, ROLLER, SNAP, BLACK
25	73942	ROLLER, D40 x 695, EPDM, SHORE 40
26	10005673	ROLLER, EPDM, D40 x 695, SHORE 18
27	10014112	ROLLER, PUR, D29/30, L680, MODIFIED
28	4105	STOPPER, SHAFT, D10/17.5 x 7.5
29	10033688	GUM, TRAY, UPPER
30	10018386	COVER, GUM



FINISHING UNIT

T8552

Finishing unit

Pos. No	Part No	Specification
31	16658	HOLDER, CABLE
32	10036887	FITTING, ELBOW, M5 x D3
33	10010571	ROLLER, DRIVEN, FINISHING UNIT
34	10041477	BELT, CONVEYOR, MEDIUM
35	10025228	GEAR, Z24, M2
36	5019	SCREW, D4 x 10
37	10033525	BELT, CONVEYOR, SHORT
38	10034139	O-RING, D38 x 7, HA1470, EPDM
39	10035152	ROLLER, DRIVEN, FINISHING UNIT, EXIT
40	10012104	ROLLER, DRIVING
41	10020189	BRACKET, DRIER
42	10034019	DIN 546, M4, NUT, SLOTTED
43	10034314	BRACKET, SUPPORT, GUM TRAY, LEFT
44	10034313	BRACKET, SUPPORT, GUM TRAY, RIGHT
45	10032080	BEARING, GUM SECTION
46	10059561	BEARING, GUM
47	10059558	SHAFT, GUM, LONG
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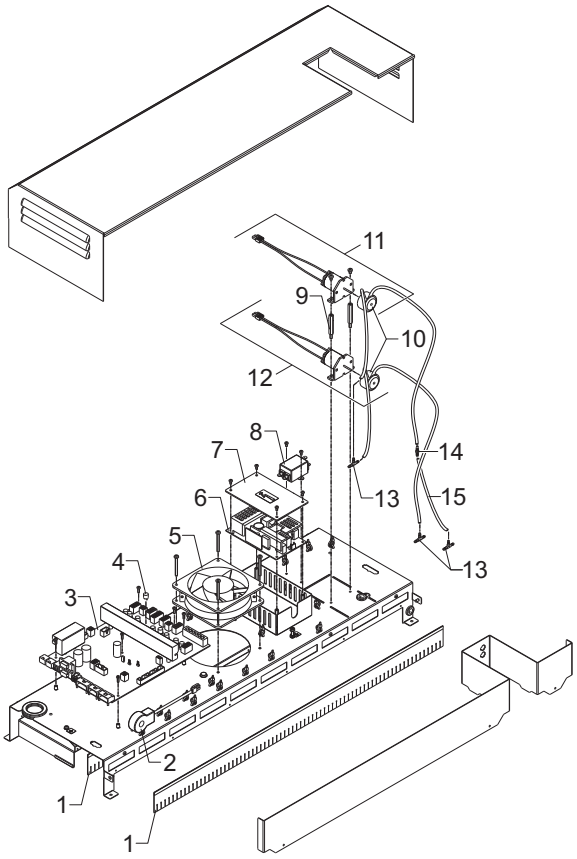

ELBOX, COOLING ZONE

T8801

Elbox, cooling zone

Pos. No	Part No	Specification
1	10017859	BARRIER, AIR, COOLING ZONE
2	10017862	TRANSFORMER, CURRENT
3	10056069	PCB, PCU **(Note: Without software)**
4	10011284	FUSE, 1AT, 5.08MM, VDE
5	26054	FAN, SUNON
6	10051945	PSU, AC>DC, 230-24, 125W, OPEN, PPS-125-24
7	10053159	SHIELD, PLASTIC
8	10053796	FILTER, EMC, 1-PHASE, 2A, FMLB-41
9	25452	SPACER, M4 x 8 + 40
10	10014399	CASSETTE, PUMP
11	10039880	PUMP, WATER, K2, X18
12	10039879	PUMP, GUM, K1, X20
13	10038867	FITTING, TEE, HOSE, D3 x 3 x 3
14	10046142	FITTING, HOSE, D3 x 3
15	10013856	HOSE, 2.5 x 1, NOVOPRENE
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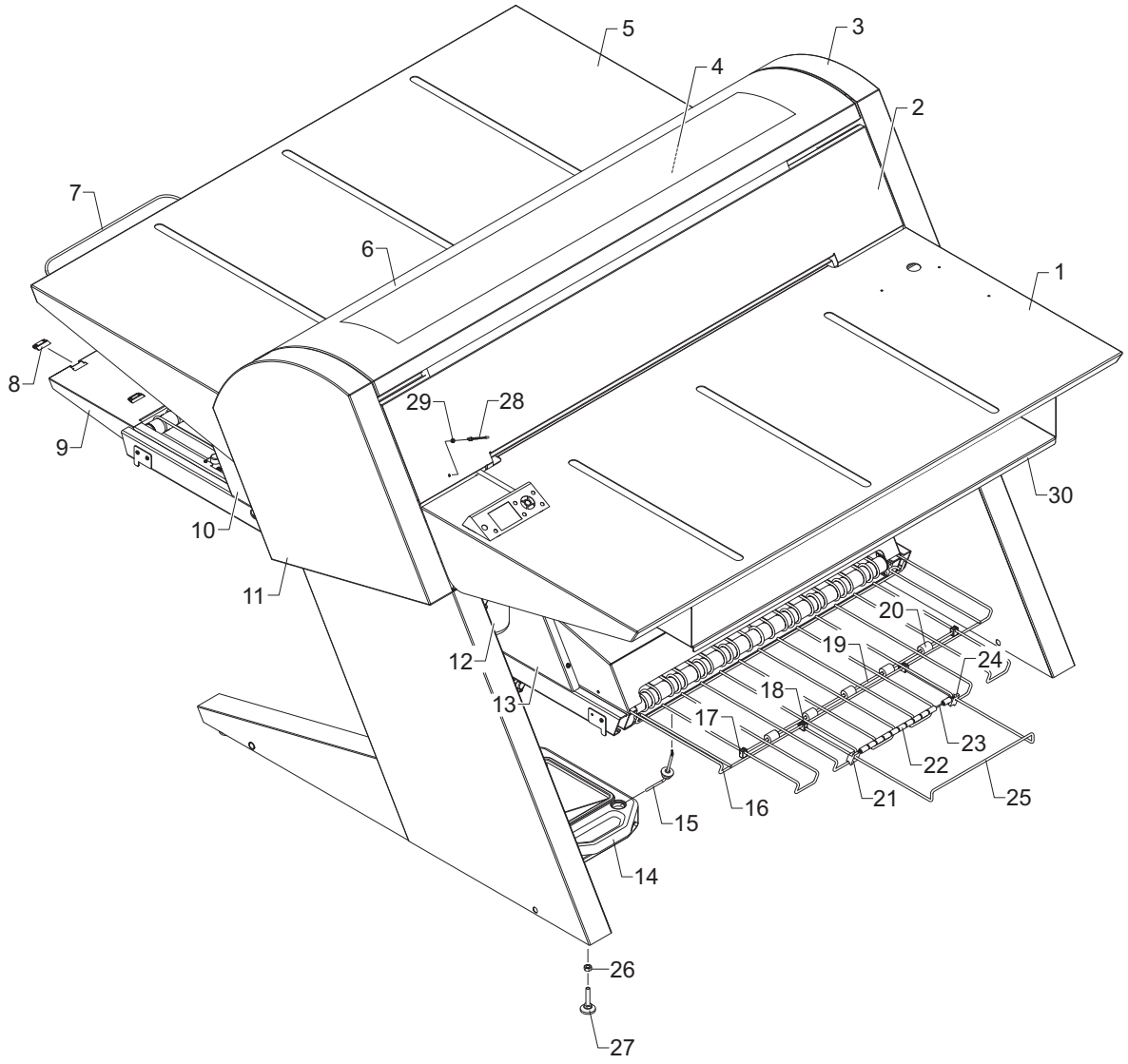
Cross reference list

Epson Part No	G&J Part No	Specification
1504179	10050214	WIPER, ASSY, ASP
	10053092	PUMP, CAP, ASSY, ESL, ASP, MODIFIED
1520217	10072485	SA, SELECTOR, UNIT
2129175	10056199	BOARD, ASSY, MAIN
1520215	10056203	HOLDER, ASSY, IC, RIGHT, ESL, ASP
F191010	10058394	PRINTHEAD, 7700
1518708	10061626	MOTOR, ASSY, CR
1500853	10061628	I/C DRAINING
1521058	10062386	CABLE HARNESS, PANEL, C, ASP
1520214	10067309	PANEL, UNIT, K, ESL, ASP
2144291	10056199	BOARD, ASSY, MAIN
2129173	10068145	BOARD, ASSY, POWER SUPPLY
1480655	10063579	LUBRICANT, G-71(BLUE)
1516265	10063580	LUBRICANT, G-84
(1541866)2142248	10071841	HARNESS, HEAD, A, ASP
1521061	10071842	HARNESS, HEAD, B;B, ASSY, ASP

Maintenance kits

Part No	Specification
10062230	SERVICE KIT, PERIODIC

Part 6b: Spare parts for PW8000

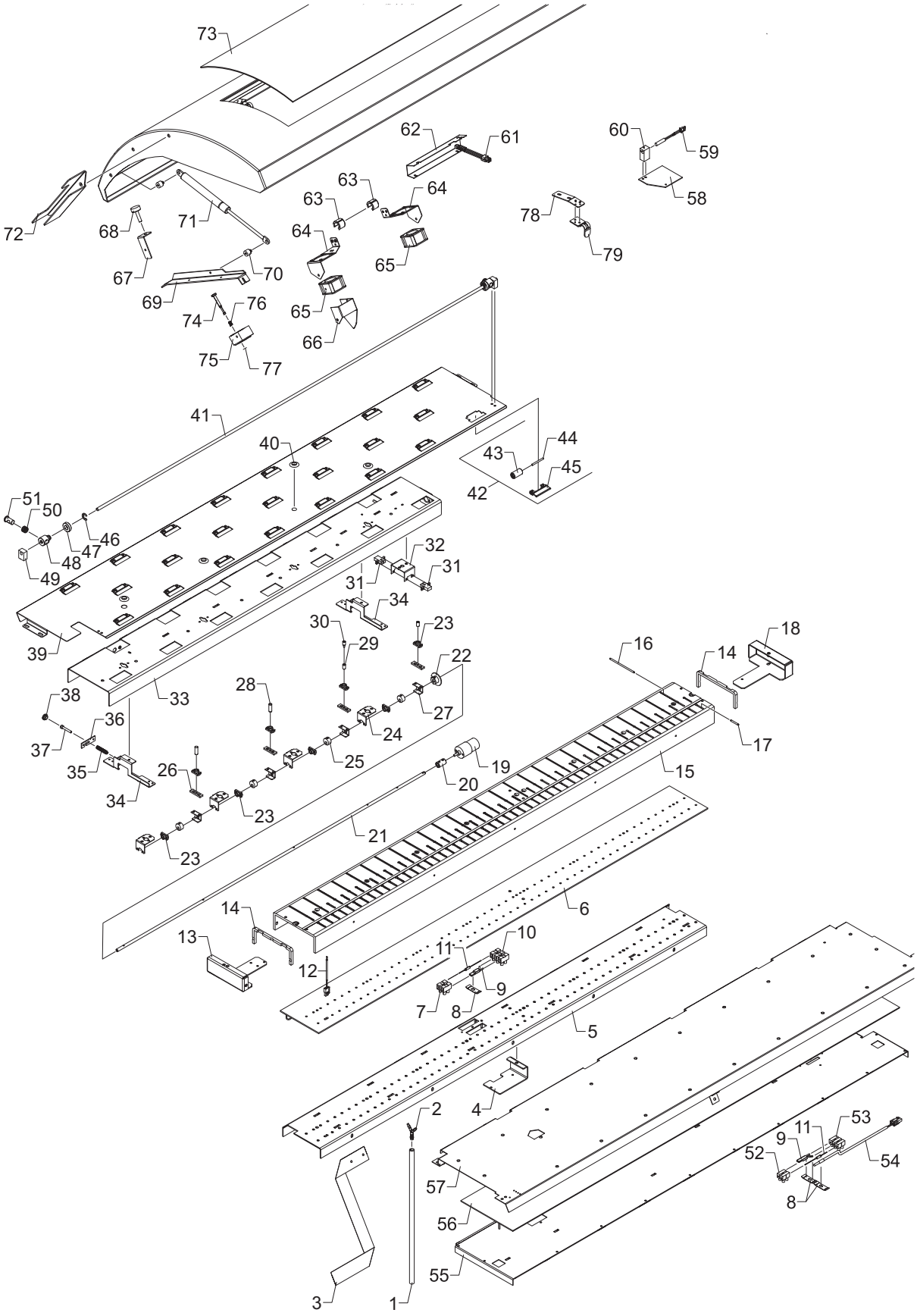


TOTAL MACHINE

T8927

Total machine

Pos. No	Part No	Specification	
1	10065964	TABLE, INPUT	
2	10065972	COVER, INPUT, PRINTER	
3	10065973	SIDECOVER, PRINTER, LEFT	
4	10065250	PRINTER, COMPLETE	
5	10065963	TABLE, EXIT	
6	10065751	LID, TOP, PRINTER, COMPLETE	
7	10065988	TUBE, EXTENSION, INPUT, FINISHING UNIT	
8	87571	ROLLER, WITH HOLDER, **COMPLETE**	
9	10065906	EXTENSION, INPUT, FINISHING UNIT, **COMPLETE**	
10	10065967	COVER, HEATER, FINISHING UNIT	
11	10065974	SIDECOVER, PRINTER, RIGHT	
12	10010948	CONTAINER, 1L	
13	10065968	COVER, DRYER	
14	10039877	TANK, 6L, BLACK/RED, CAP	
15	10039876	PIPE, SUCTION, WATER	
16	10065979	TRAY, EXIT	
17	10061176	BRACKET, EXTENSION, TRAY, EXIT	
18	10060976	BRACKET, EXTENSION, TRAY, EXIT	
19	10061177	SHAFT, EXTENSION, TRAY, EXIT, LONG	
20	10061175	ROLLER, EXTENSION, FINISHING UNIT, EXIT	
21	10060978	BRACKET, EXTENSION, TRAY, EXIT	
22	73245	ROLLER, D13/D3.3 x 25.5	
23	10061168	SHAFT, EXTENSION, TRAY, EXIT, SHORT	
24	10060977	BRACKET, EXTENSION, TRAY, EXIT	
25	10066052	TUBE, EXTENSION, FINISHING UNIT	
26	1504	NUT, M10	
27	0011841	LEG, ADJUSTABLE, M10 x 50	
28	10058401	LED, CONTROL, 5MM, 3 COLOUR, REGISTRATION	
29	10063734	LED, HOLDER, BLACK, 5MM (SET)	
30	10067306	SHELF, PLATES	*OPTION*

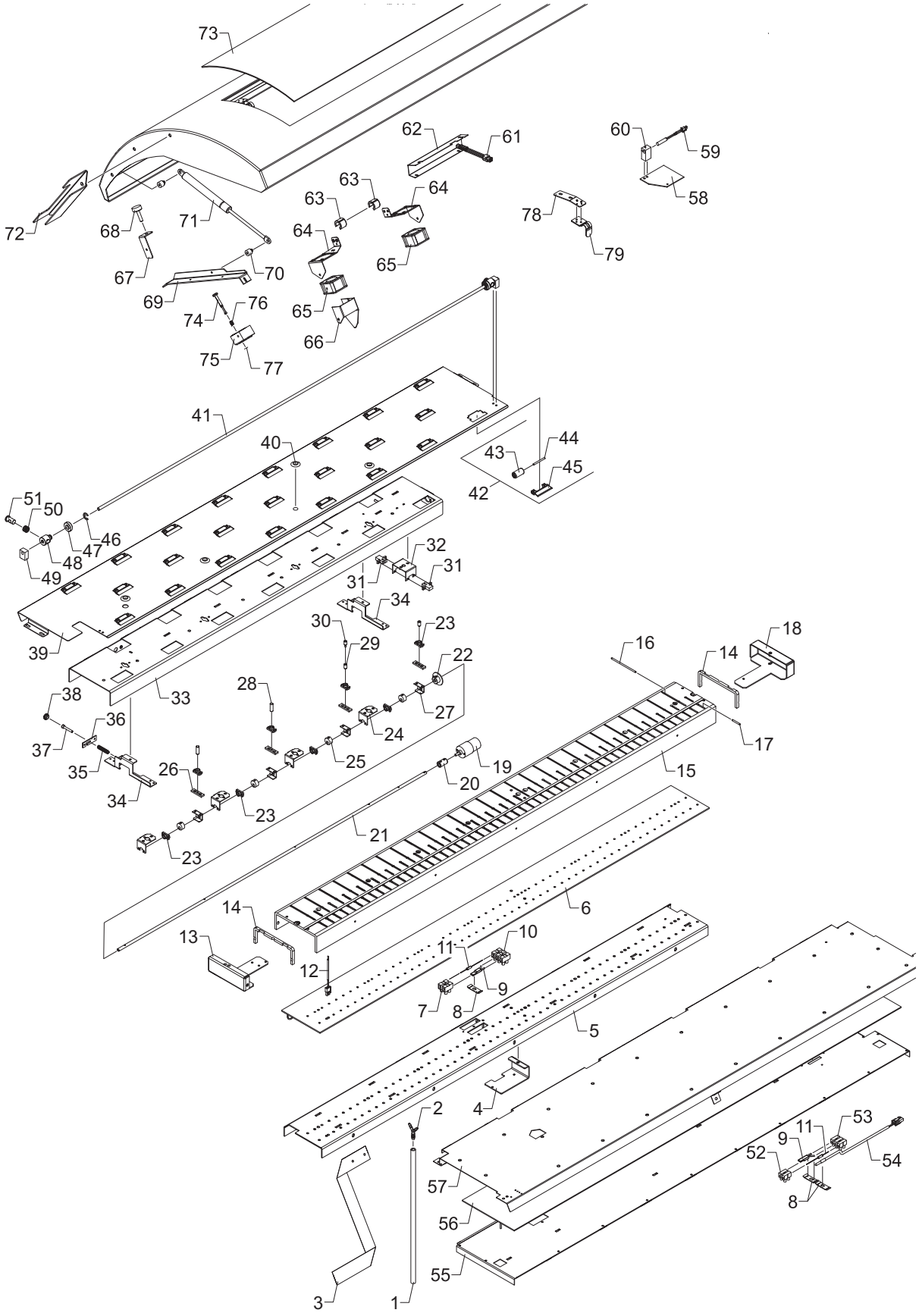


REGISTRATION SYSTEM, PRINT BED AND HEATER

T8928

Registration system, print bed and heater

Pos. No	Part No	Specification
1	25177	HOSE, SILICONE, D6/10
2	10046147	Y-FITTING, HOSE, D4-D6-D4
3	10066007	GROUND, FOIL, DISPLAY, PRINTER
4	10065266	BRACKET, PRINT BED, MIDDLE
5	10065254	BRACKET, PRINT BED/HEATER
6	10065251	HEATER, 115 x 1160, 500W, OHS-60/84°C, **COMPLETE**
7	6262	TERMINAL, 10E/2
8	10059894	CLAMP, OVERHEAT
9	10060725	SWITCH, THERMAL, 60°C
10	6263	TERMINAL, 3 CONNECTIONS
11	10060726	FUSE, THERMAL, 84°C, ONE-SHOT
12	10048832	SENSOR, TEMPERATURE, PT-100, WITH PLUG
13	10059885	BEARING, SIDE, PROFILE
14	10059889	FOAM, 4 x 8 x 195
15	10065246	PROFILE, PRINT BED
16	10060799	INLAY, STRIP, LONG
17	10060800	INLAY, STRIP, SHORT
18	10066048	BRACKET, PRINT BED
19	10057728	MOTOR, 24V DC, GEAR
20	10061035	BUSHING, SHAFT, REGISTER
21	10064910	SHAFT, FRONT, REGISTER
22	10061036	DISC, REGISTRATION
23	10061031	BUSHING, REGISTER
24	10061033	BRACKET, REGISTER
25	10057826	CAM, FRONT, REGISTER
26	10060971	HOLDER, PIN
27	10060970	LIFTER, REGISTER
28	10061032	PIN, REGISTER, L=18MM
29	10065606	PIN, REGISTER, SHORT
30	10065603	PIN, REGISTER, REMOVABLE

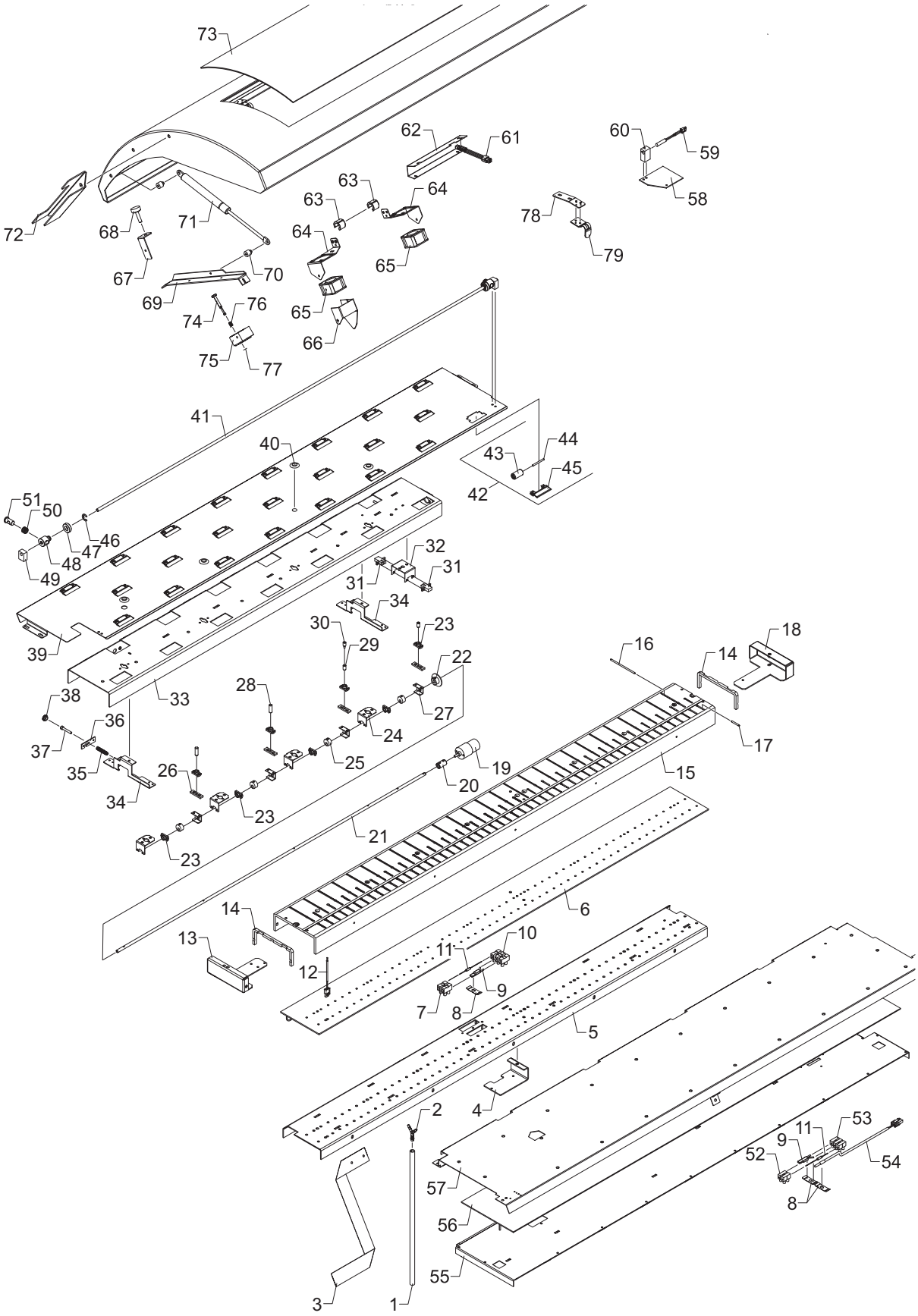


REGISTRATION SYSTEM, PRINT BED AND HEATER

T8928

Registration system, print bed and heater

Pos. No	Part No	Specification
31	10009707	SENSOR, OPTICAL
32	10061040	BRACKET, SENSOR, REGISTER
33	10065608	BRACKET, REGISTER
34	10065607	BRACKET, ADJUSTMENT, REGISTER
35	10058535	SPRING, D6 x 30 x 0.75
36	10058223	SUPPORT, SPRING, REGISTER
37	15379	SCREW, M4 x 25
38	25901	NUT, M4
39	10065245	GUIDE, PRINTER, EXIT, **COMPLETE**
40	10065609	GROMMET, D10 x D20, CONIC
41	10065243	SHAFT, GUIDE, WHEEL, EXIT
42	87571	ROLLER, WITH HOLDER, **COMPLETE**
43	73245	ROLLER, D13/D3.3 x 25.5
44	35907	SHAFT, ROLLER, D3, L=33
45	53916	HOLDER, FOR, ROLLER, GUIDE
46	35320	CIRCLIP, D8 x 16.3
47	10063583	WHEEL, D20/d10 x 5, POM
48	10063584	HOLDER, ROLLER, GUIDE, WHEEL, EXIT
49	10063585	HOLDER, SHAFT, GUIDE, WHEEL, EXIT
50	10063587	SPRING, D10/d1 x 15
51	10063586	BREAK, GUIDE, WHEEL, EXIT
52	10061793	TERMINAL, 6E, DS/2
53	10061792	TERMINAL, 6E, DS/3
54	10059768	SENSOR, TEMPERATURE, THERMISTOR, PLASTIC
55	10065249	PLATE, HEATER, 1170 x 160, BOTTOM
56	10065248	HEATER, 1170 x 160
57	10065261	PLATE, HEATER, 1170 x 160, TOP
58	10058148	BRACKET, SENSOR
59	10059688	SENSOR, REED, L=300MM
60	10057724	HOLDER, SENSOR



REGISTRATION SYSTEM, PRINT BED AND HEATER

T8928

Registration system, print bed and heater

Pos. No	Part No	Specification
61	10012688	SENSOR, REFLECTIVE
62	10059896	BRACKET, SENSOR, PRINT HEAD
63	10051045	BUSHING, OPEN, SLIDE, HEAD, PRINTER
64	10061043	BRACKET, BLOWER, PRINT HEAD
65	10061592	FAN, WITH CONNECTOR
66	10061619	PLATE, REFLECTOR, AIR
67	10066009	BRACKET, DAMPER
68	10046138	DAMPER, VIBRATION, M6 x 25
69	10066004	BRACKET, SPRING, LID, DISPLAY SIDE
	10066005	BRACKET, SPRING, LID, NON DISPLAY SIDE (NOT SHOWN)
70	10066006	TAP, GAS, SPRING
71	10048541	SPRING, GAS, 150N, DAMPED
72	10065862	HANDLE, LID, PRINTER
73	10065752	PERSPEX, LID, PRINTER
74	10066458	PIN, RELEASE
75	10066457	BUSHING, RELEASE
76	10067561	SPRING, D5 x 10 x 0.5
77	25823	CIRCLIP, D4 x 0.7
78	10066008	BRACKET, ACTUATOR, INTERLOCK, PRINTER
79	10051357	STRIKER, SENSOR
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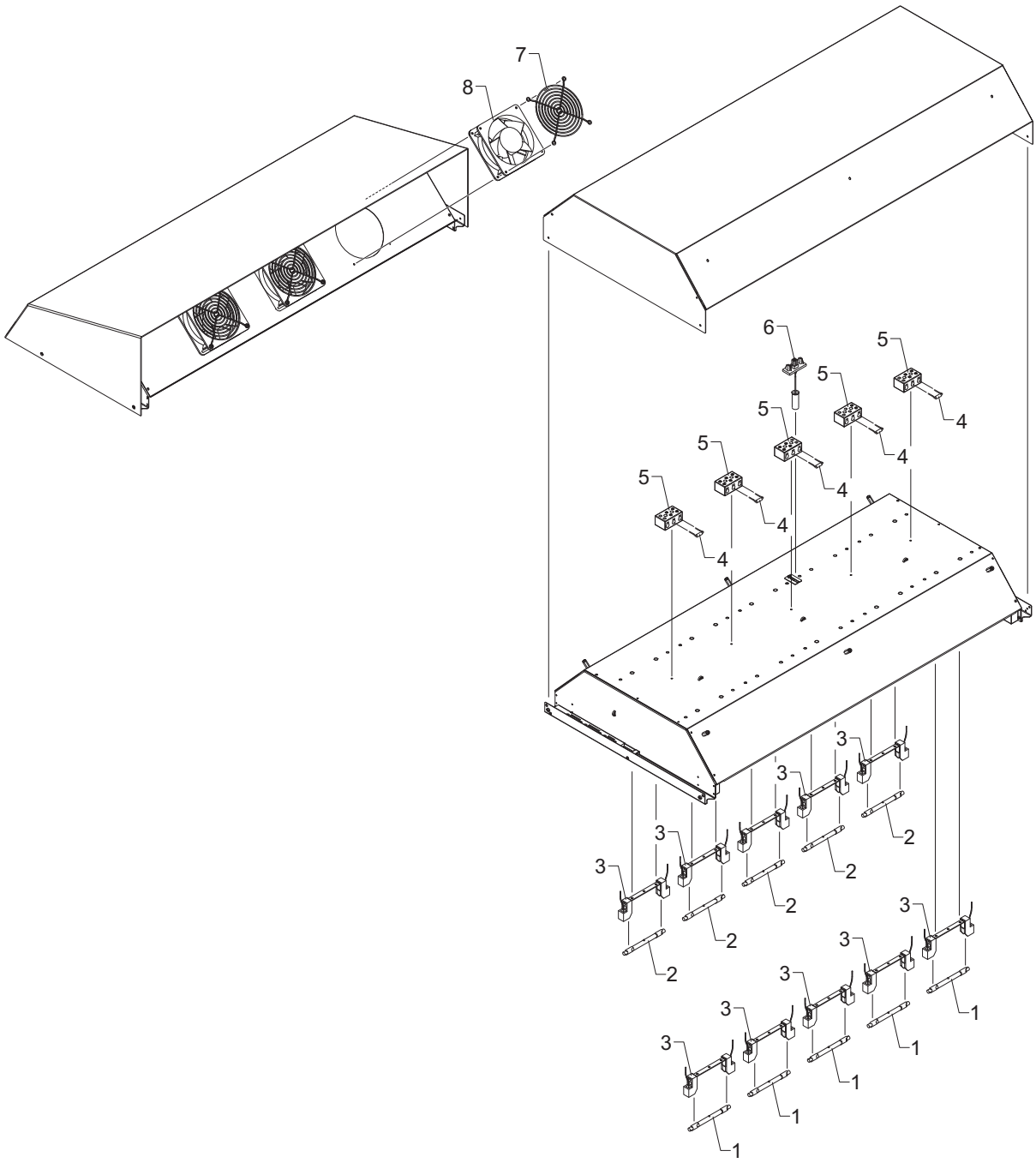

DRYER AND CURING

T8929

Dryer and curing

Pos. No	Part No	Specification
1	10065128	BULB, HALOGEN, 160W, 230V, 2900K
2	10065127	BULB, HALOGEN, 240W, 230V, 2900K
3	10010361	SOCKET, HALOGENLAMP
4	10012598	FUSE, THERMAL, 184°C
5	10014276	TERMINAL, 3-CIR, PORCELAIN
6	10053094	TEMPERATURE, SENSOR, CURING UNIT
7	10019245	GUARD, METAL, FAN, (FG-12), 120 x 120
8	26054	FAN, SUNON
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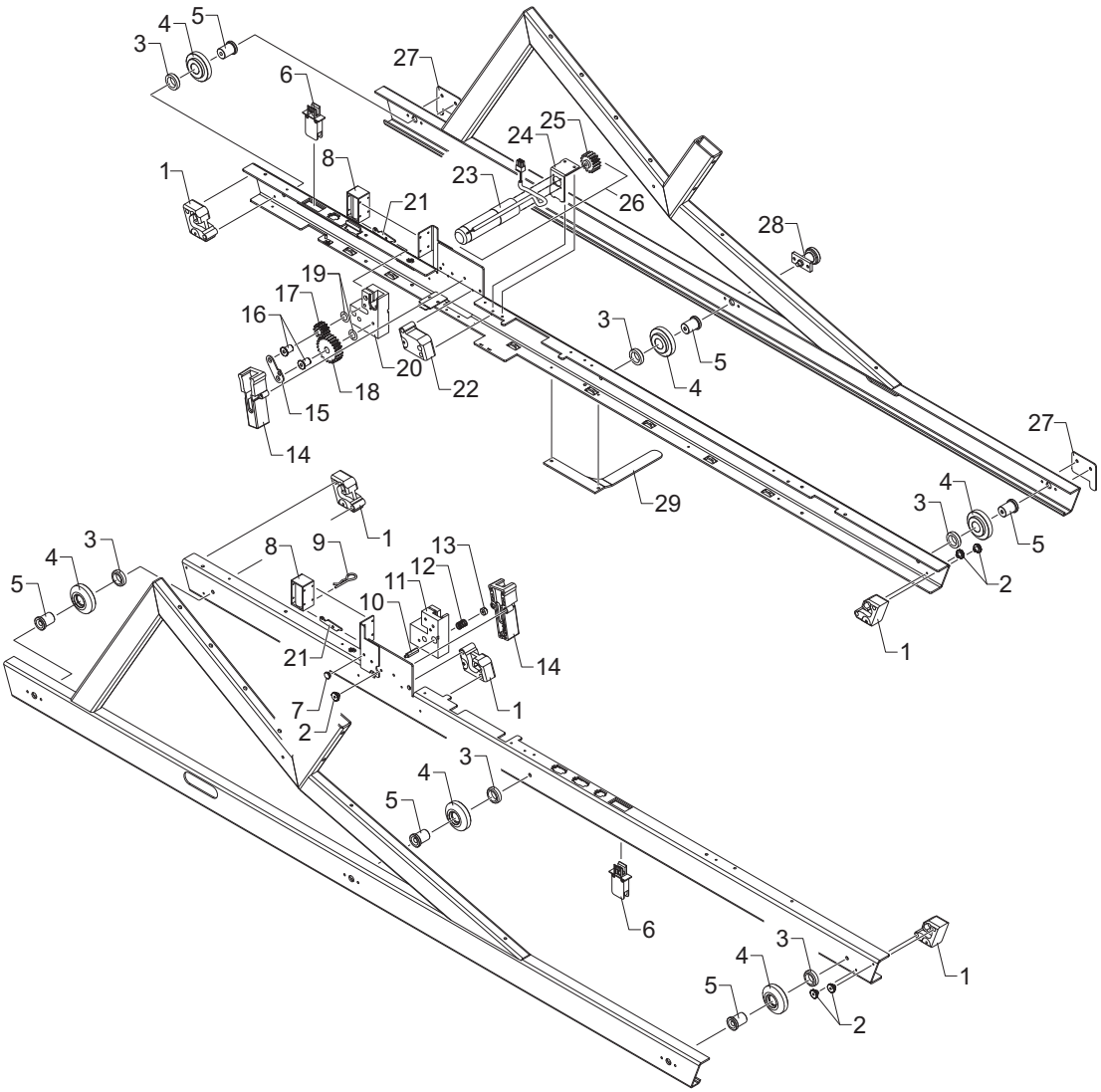
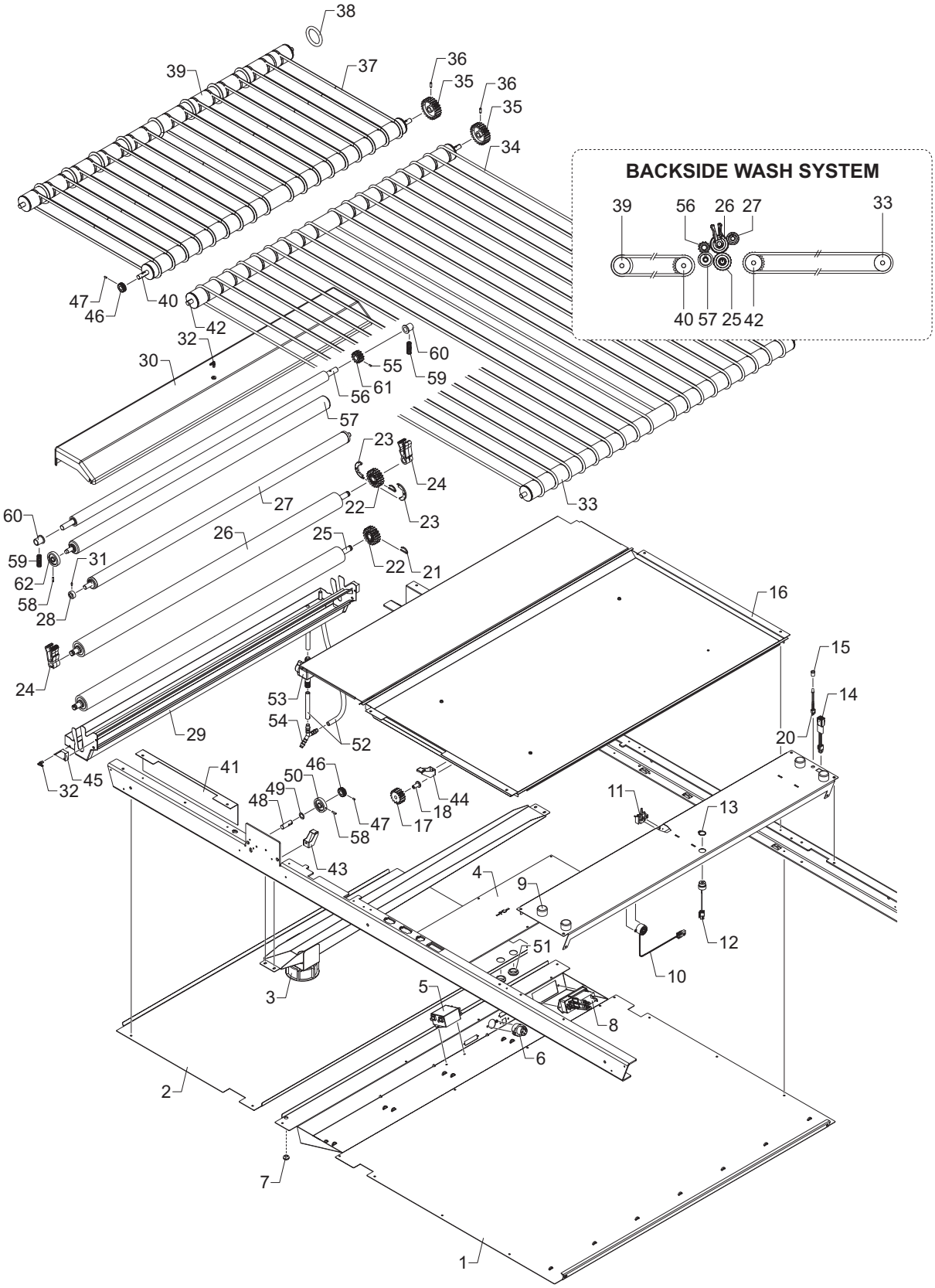


SIDE MEMBERS

T8930

Side members

Pos. No	Part No	Specification
1	10010560	BLOCK, BEARING, GEAR
2	10044129	NUT, FINGER
3	10065888	WASHER, SLIDE
4	10065886	WHEEL, SLIDE
5	10065887	BUSHING, SLIDE
6	16864	SWITCH, LID, 2 CONT.
7	25901	NUT, M4
8	10075363	SOLENOID, PULL, 24 VDC
9	25110	PIN, SPLIT, D3 x 54
10	10053238	SPACER, M4 x 6 + 25
11	10063590	BLOCK, BEARING, GEAR, WASH-BRUSH
12	54316	SPRING, D12.6/1.2, L=42
13	10062962	BEARING, ROLLER, SCRUB
14	10011013	BEARING, ROLLER, WHITE, 13 KG, **COMPLETE**
15	10065866	BRACKET, GEARS, BUSHING
16	10063517	BUSHING, BEARING
17	54502	GEAR, IDLE, M2, Z12
18	73403	GEAR, Z24, M2, B15
19	64567	WASHER, POM, D12 x D20 x 9
20	10062933	BLOCK, BEARING, GEAR, WASH-BRUSH
21	10065046	LEVER, SOLENOID
22	10024329	BLOCK, BEARING, GEAR
23	10054787	MOTOR, DUNKER
24	10010613	BRACKET, MOTOR
25	10034526	GEAR, Z16, M2
26	10054788	MOTOR, DRIVE, WITH GEAR, **COMPLETE**
27	10066016	BRACKET, SAFETY
28	10065890	POSITION, BOLT
29	10066015	HANDLE
30		

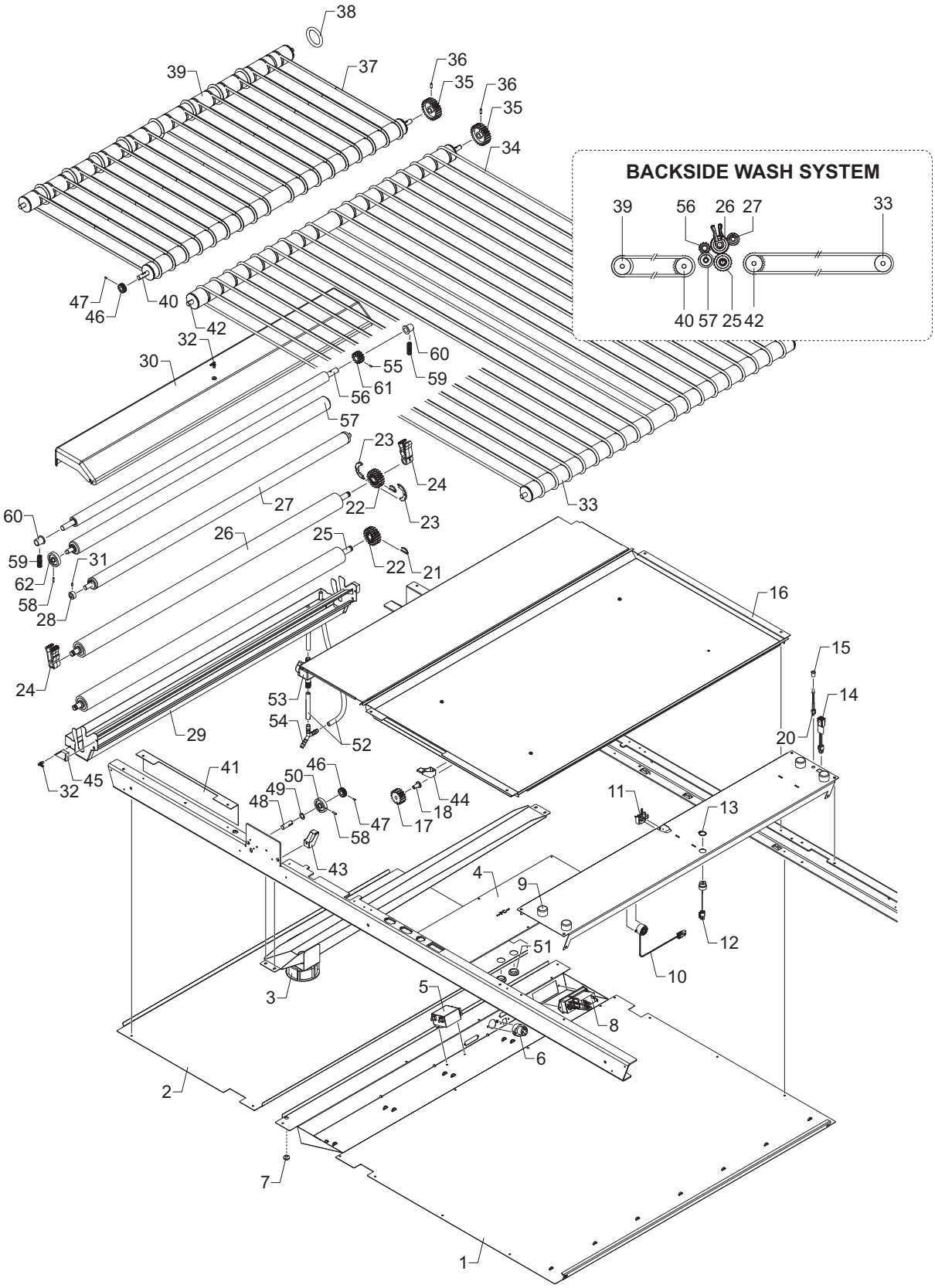


FINISHING UNIT

T8931

Finishing unit

Pos. No	Part No	Specification
1	10064631	COVER, BOTTOM, FRONT
2	10064653	COVER, BOTTOM, BACK
3	10064335	TRAY, GUM
4	10065870	COVER, POWER ENTRY
5	10053884	FILTER, EMC, 1-PHASE, 16A
6	26364	PLUG, FEMALE, 4-POLE
7	6295	GROMMET, D6/9 x 1.5
8	10053883	SWITCH, LINE, 16A-FUSED
9	54381	PIN, GUIDE, TABLE, FEED
10	10012692	BUZZER
11	16787	SWITCH, ASSEMBLY
12	10054414	SENSOR, FINISHING UNIT
13	35698	CIRCLIP, D16 x 1
14	10012622	SELECTOR, PROGRAM
15	10012027	LED, HOLDER
16	10065134	REFLECTOR, BOTTOM
17	10017962	GEAR, ¥6, Z16, M2
18	10017903	BUSHING, BEARING
19	10012449	PLATE, AIRFLOW, COOLING ZONE
20	10012621	LED, CONTROL
21	73241	CLIP, R-SHAPE, D2.5 x 20
22	73262	GEAR, Z19, M2, D12
23	74038	GUIDE, PLATE, GEAR
24	43600	BEARING, ROLLER, SNAP, BLACK
25	10033456	ROLLER, D40 x 870, EPDM, SHORE 40, BULGED
26	10001918	ROLLER, EPDM, D40 x 870, SHORE 18
27	10064625	ROLLER, PUR, D29, L860, MODIFIED
28	4105	STOPPER, SHAFT D10/17.5 x 7.5
29	10064633	GUM, TRAY, UPPER
30	10064333	COVER, GUM
31	5001	SCREW, ALLEN, 3 x 4
32	10036887	FITTING, ELBOW, M5 x D3

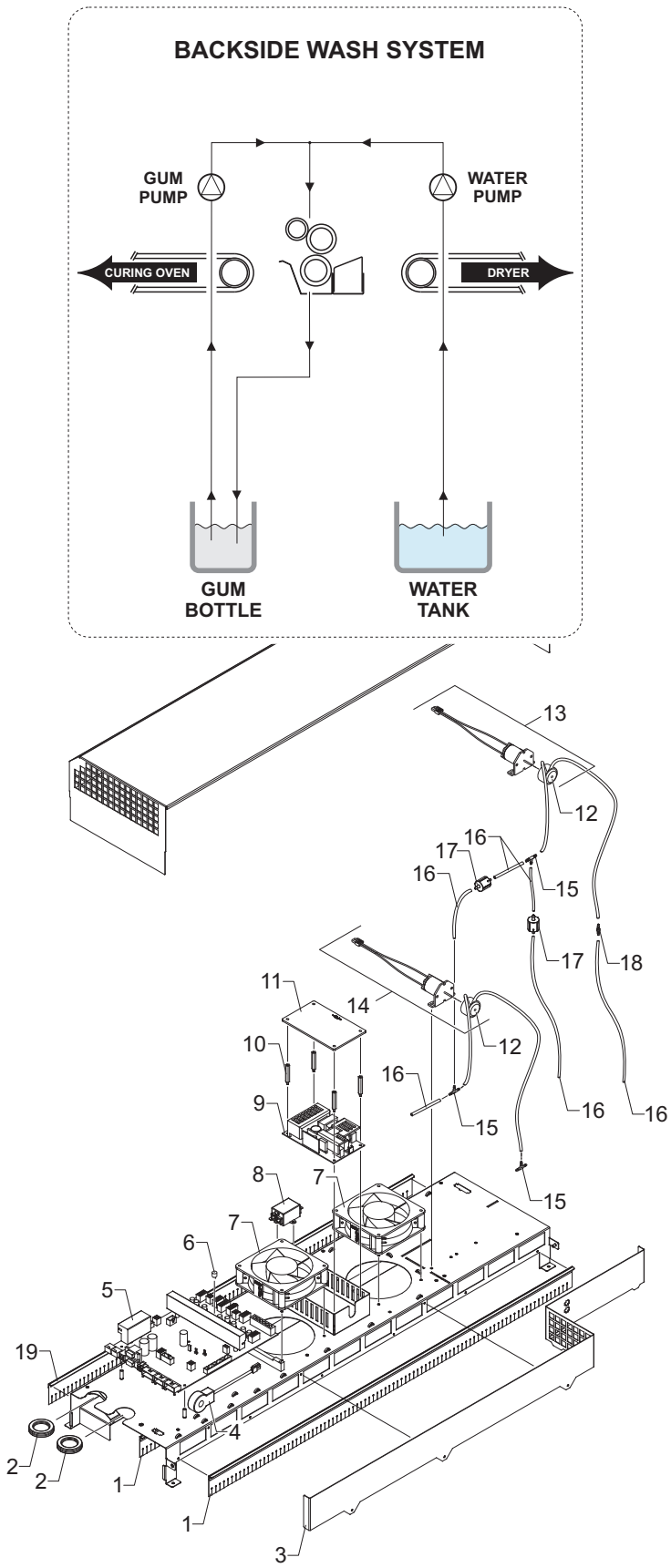


FINISHING UNIT

T8931

Finishing unit

Pos. No	Part No	Specification
33	10064337	CONVEYOR, ROLLER, DRIVEN
34	10033526	BELT, CONVEYOR, LONG
35	10025228	GEAR, Z24, M2
36	1530	SCREW, M4 x 12
37	10064602	BELT, CONVEYOR, WASH-BRUSH
38	10034139	O-RING, D38 x 7, HA1470, EPDM
39	10064646	ROLLER, DRIVEN, FINISHING UNIT, EXIT
40	10064656	CONVEYOR, ROLLER
41	10062939	BRACKET, DRYER
42	10064643	CONVEYOR, ROLLER
43	10034314	BRACKET, SUPPORT, GUM TRAY, LEFT
44	10034313	BRACKET, SUPPORT, GUM TRAY, RIGHT
45	10063512	BEARING, GUM SECTION
46	73012	GEAR, Z20, D10/7.5, M1
47	5000	SCREW, ALLEN, 3 x 6
48	10063593	SHAFT, GEAR, INTERMEDIATE
49	35075	WASHER, NYLON, D16/10.2 x 0.5
50	10066452	GEAR, Z34, D10, M1
51	10030326	BUSHING, D16/19 x 1.6
52	25177	HOSE, SILICONE, D6/10
53	25293	FITTING, VALVE, ADJUSTABLE, D12
54	12353669	Y-FITTING, HOSE, UNION
55	5017	SCREW, M4 x 5
56	10002482	ROLLER, RUBBER, D25, L926
57	10064621	ROLLER, PUR, WASH-BRUSH, **COMPLETE**
58	15400	SCREW, M3 x 12
59	10065218	SPRING, D5.5 x L20, 18N
60	10065044	BEARING, SLIDE, D12 x 16, L19
61	10063596	GEAR, M2, Z12, W/M4
62	24593	GEAR, Z34, D9.9/35.7 x 7.5, M=1
63		



ELBOX, COOLING ZONE

T8932

Elbox, cooling zone

Pos. No	Part No	Specification
1	10064345	BARRIER, AIR, COOLING ZONE
2	6328	GROMMET, D37
3	10064779	SIDELID
4	10017862	TRANSFORMER, CURRENT
5	10056069	PCB, PCU **(Note: Without software)**
6	10011284	FUSE, 1AT, 5.08MM, VDE
7	26054	FAN, SUNON
8	10053796	FILTER, EMC, 1-PHASE, 2A, FMLB-41
9	10051945	PSU, AC>DC, 230-24, 125W, OPEN, PPS-125-24
10	10060048	SPACER, M3 x 6 + 35
11	10053159	SHIELD, PLASTIC
12	10014399	CASSETTE, PUMP
13	10039880	PUMP, WATER, K2, X18
14	10039879	PUMP, GUM, K1, X20
15	10038867	FITTING, TEE, HOSE, 3 x 3 x 3
16	10065976	HOSE, SILICONE, d3/D5
17	10062934	CHECKVALVE, PP/SILICONE, 1/8" x 1/8"
18	10046142	FITTING, HOSE, D3 x D3
19	10067318	BARRIER, AIR, CURING
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

Cross reference list

Epson Part No	G&J Part No	Specification
1504179	10050214	WIPER, ASSY, ASP
	10053092	PUMP, CAP, ASSY, ESL, ASP, MODIFIED
1520217	10072485	SA, SELECTOR, UNIT
1520215	10056203	HOLDER, ASSY, IC, RIGHT, ESL, ASP
F191010	10058394	PRINTHEAD, 7700
1518708	10061626	MOTOR, ASSY, CR
1500853	10061628	I/C DRAINING
1521058	10062386	CABLE HARNESS, PANEL, C, ASP
1520214	10067309	PANEL, UNIT, K, ESL, ASP
1513265	10068144	BOARD, ASSY, MAIN
2129173	10068145	BOARD, ASSY, POWER SUPPLY
1480655	10063579	LUBRICANT, G-71(BLUE)
1516265	10063580	LUBRICANT, G-84
(1541866)2142248	10071841	HARNESS, HEAD, A, ASP
1521061	10071842	HARNESS, HEAD, B;B, ASSY, ASP

Maintenance kits

Part No	Specification
10062230	SERVICE KIT, PERIODIC

Appendix A: Electrical diagrams

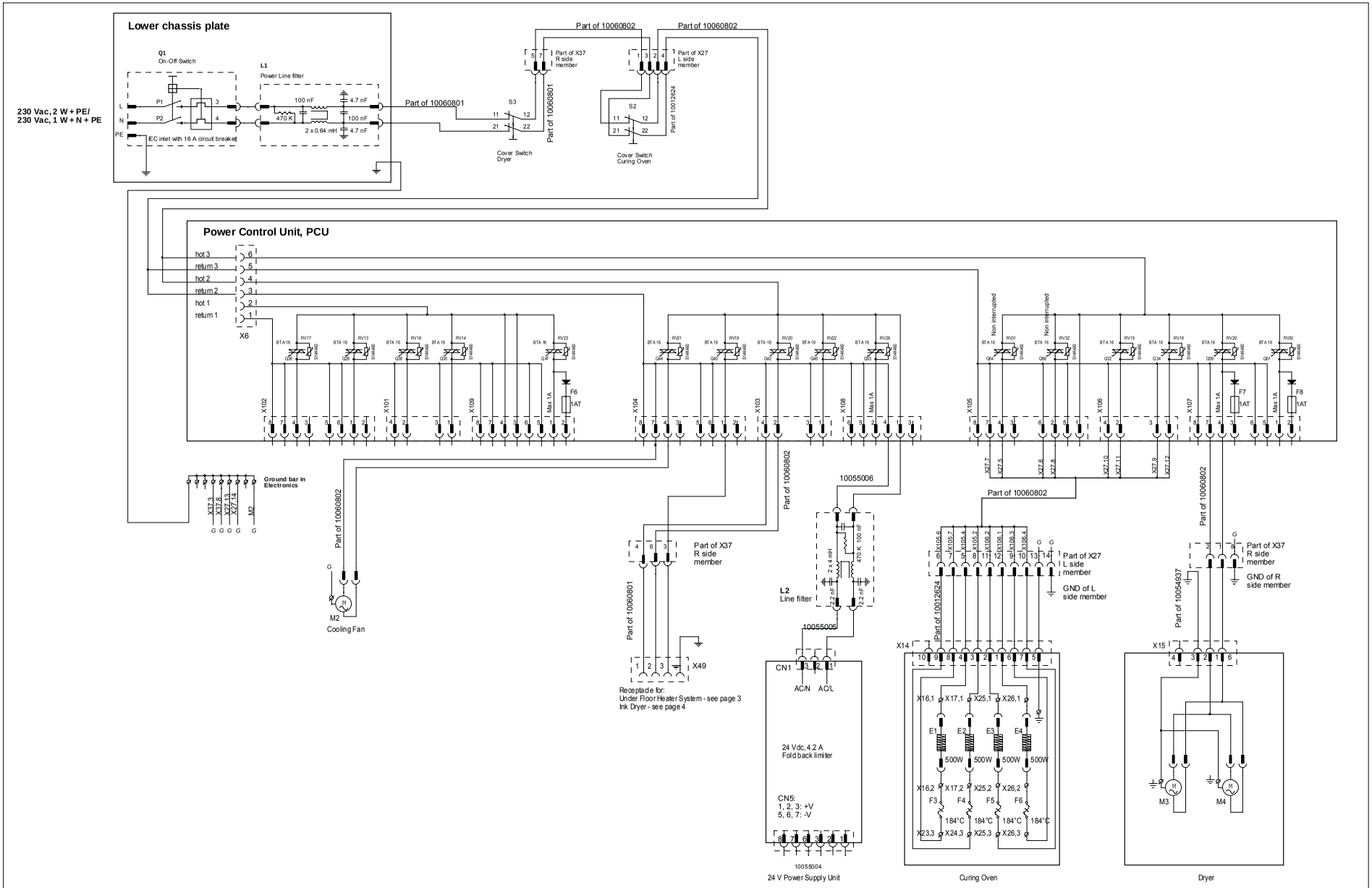
This chapter includes all electrical diagrams for the **PlateWriter 3000**.

The diagrams (4 pages) cover:

- Page 1 of 4:
  Main power distribution
  Main switch and primary voltage
- Page 2 of 4:
  Low voltage wiring
  Sensors, switches, LEDs and motors
- Page 3 of 4:
  Printer plane
  Wiring schematic
- Page 4 of 4:
  Optional ink dryer
  Wiring schematic

Main power distribution

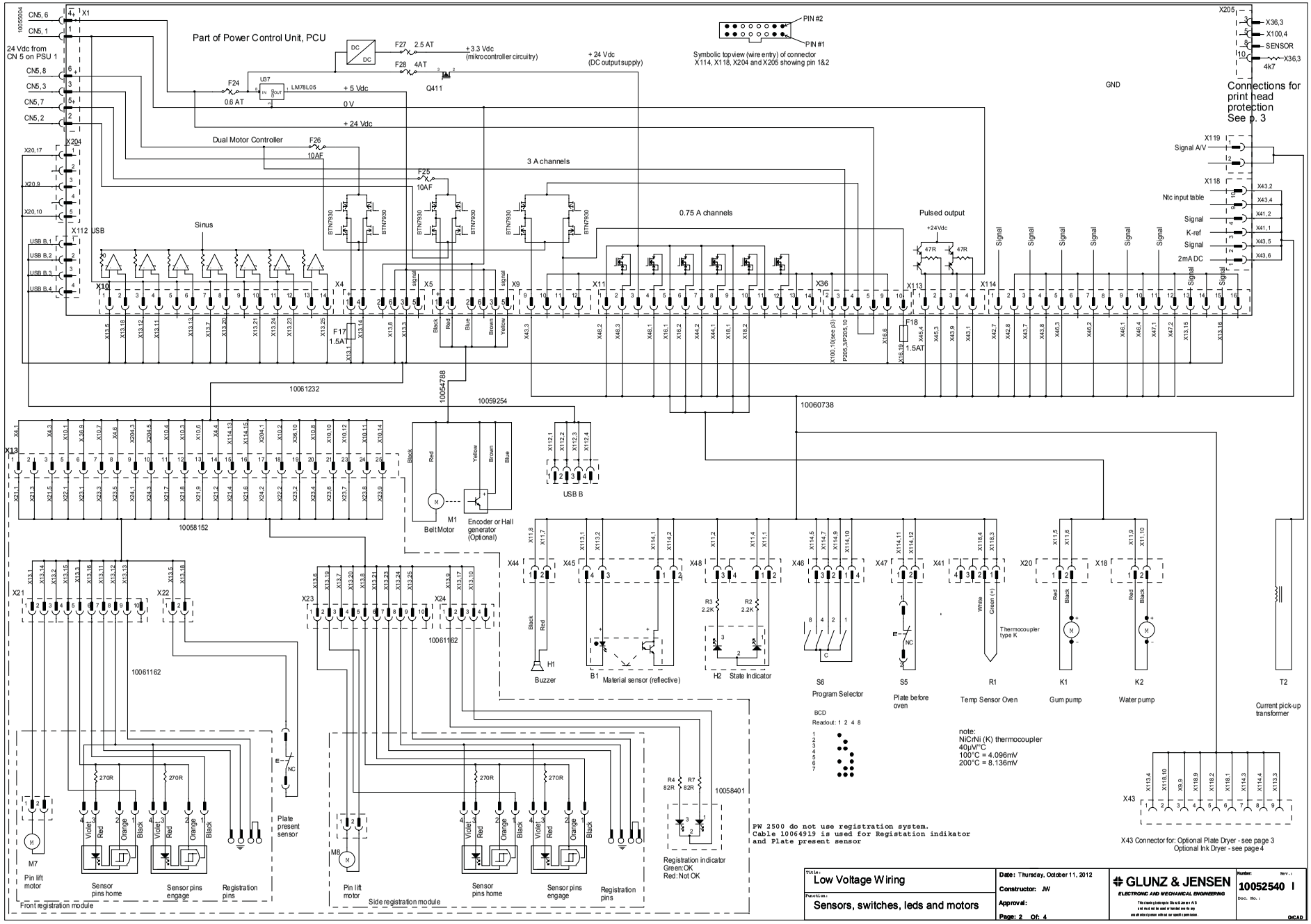
Main switch and primary voltage



Title: Main Power Distribution	Date: Tuesday, August 28, 2012	GLUNZ & JENSEN ELECTRONIC AND MECHANICAL ENGINEERING	Number 10052540 Rev.: I
Function: Main Switch and Primary Voltage	Constructor: JW Approval: Page: 1 Of: 4		Doc. No.: OrCAD

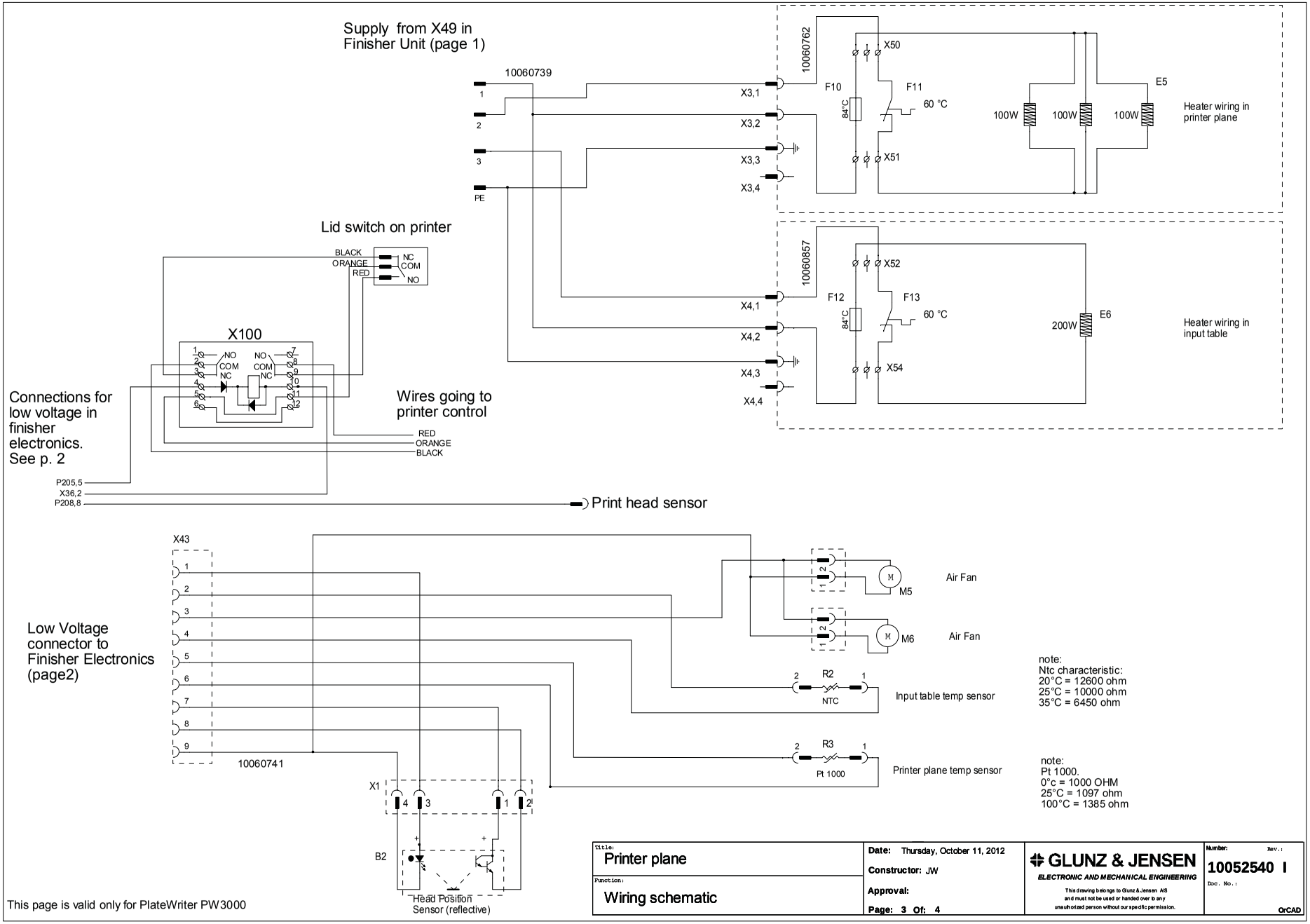
Low voltage wiring

Sensors, switches, LEDs and motors


Part of Power Control Unit, PCU
24 Vdc from CN 5 on PSU 1
CN5, 6
CN5, 1
CN5, 8
CN5, 3
CN5, 7
CN5, 2
F27 2.5 AT
+3.3 Vdc (mikrocontroller circuitry)
F28 4AT
+ 24 Vdc (DC output supply)
Q411
F24 0.6 AT
U37 LM78L05
+ 5 Vdc
0 V
+ 24 Vdc
PIN #2
PIN #1
Symbolic topview (wire entry) of connector X114, X118, X204 and X205 showing pin 1&2
GND
Connections for print head protection See p. 3
Dual Motor Controller
F26 10AF
F25 10AF
3 A channels
0.75 A channels
Pulsed output
+24Vdc
47R
Sinus
X112 USB
Signal A/V
Ntc input table
K-ref
2mA DC
F17 1.5AT
F18 1.5AT
10061232
10054788
10059254
10060738
10058152
Belt Motor
Encoder or Hall generator (Optional)
USB B
Buzzer
Material sensor (reflective)
State Indicator
Program Selector
Plate before oven
Temp Sensor Oven
Gum pump
Water pump
Current pick-up transformer
Thermocoupler type K
BCD
Readout: 1 2 4 8
note:
NiCrNi (K) thermocoupler
40µV/°C
100°C = 4.096mV
200°C = 8.136mV
10061162
270R
Plate present sensor
Pin lift motor
Sensor pins home
Sensor pins engage
Registration pins
Front registration module
Side registration module
10058401
R4 82R
R7 82R
Registration indicator Green: OK Red: Not OK
PW 2500 do not use registration system.
Cable 10064919 is used for Registation indikator and Plate present sensor
X43 Connector for: Optional Plate Dryer - see page 3
Optional Ink Dryer - see page 4
Title: Low Voltage Wiring
Function: Sensors, switches, leds and motors
Date: Thursday, October 11, 2012
Constructor: JW
Approval:
Page: 2 Of: 4
GLUNZ & JENSEN
ELECTRONIC AND MECHANICAL ENGINEERING
Number: 10052540 I
Rev.: I
Doc. No.:
OrCAD

Printer plane

Wiring schematic

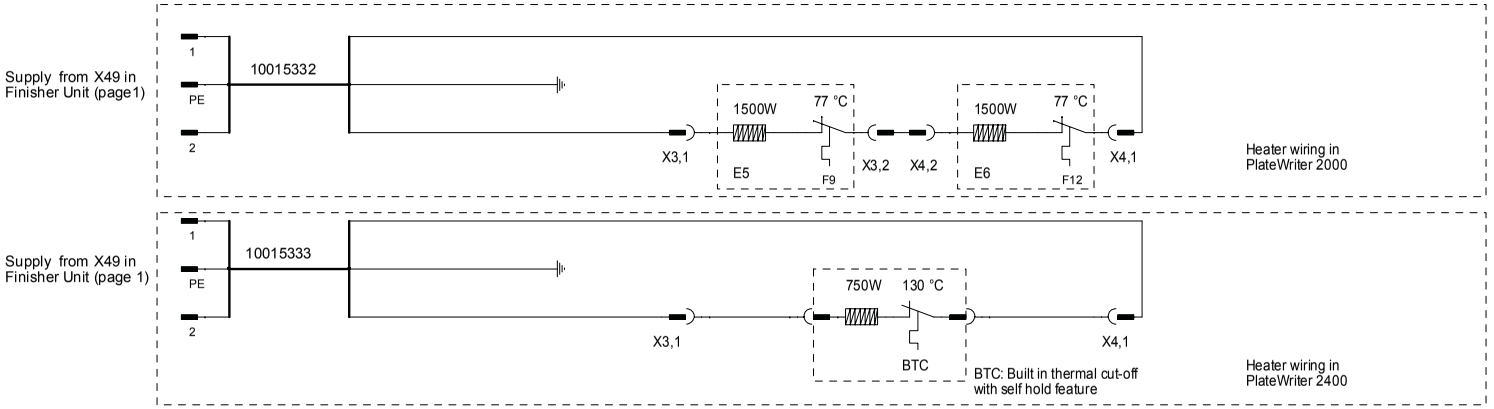


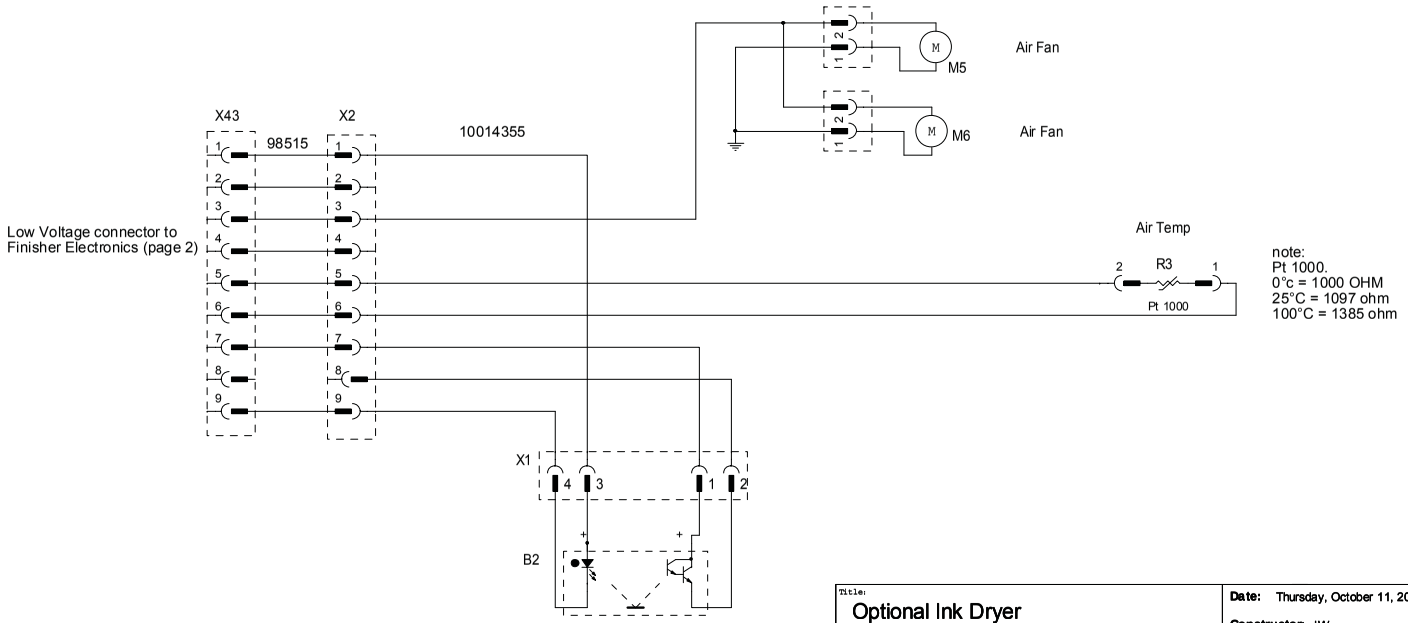
This page is valid only for PlateWriter PW3000

Title: Printer plane Function: Wiring schematic	Date: Thursday, October 11, 2012 Constructor: JW Approval: Page: 3 Of: 4	GLUNZ & JENSEN ELECTRONIC AND MECHANICAL ENGINEERING This drawing belongs to Glunz & Jensen A/S and must not be used or handed over to any unauthorized person without our specific permission.	Number: 10052540 I Rev.: Doc. No.: OrCAD

Optional ink dryer

Wiring schematic





Title: Optional Ink Dryer Function: Wiring schematic	Date: Thursday, October 11, 2012 Constructor: JW Approval: Page: 4 Of: 4	GLUNZ & JENSEN ELECTRONIC AND MECHANICAL ENGINEERING This drawing belongs to Glunz & Jensen A/S and mus t not be used or handed over to any unauthorized person without our s pecific permission.	Number: 10052540 Rev.: I Doc. No.: Or CAD

Appendix B: Electrical diagrams

This chapter includes all electrical diagrams for the PW 8000.

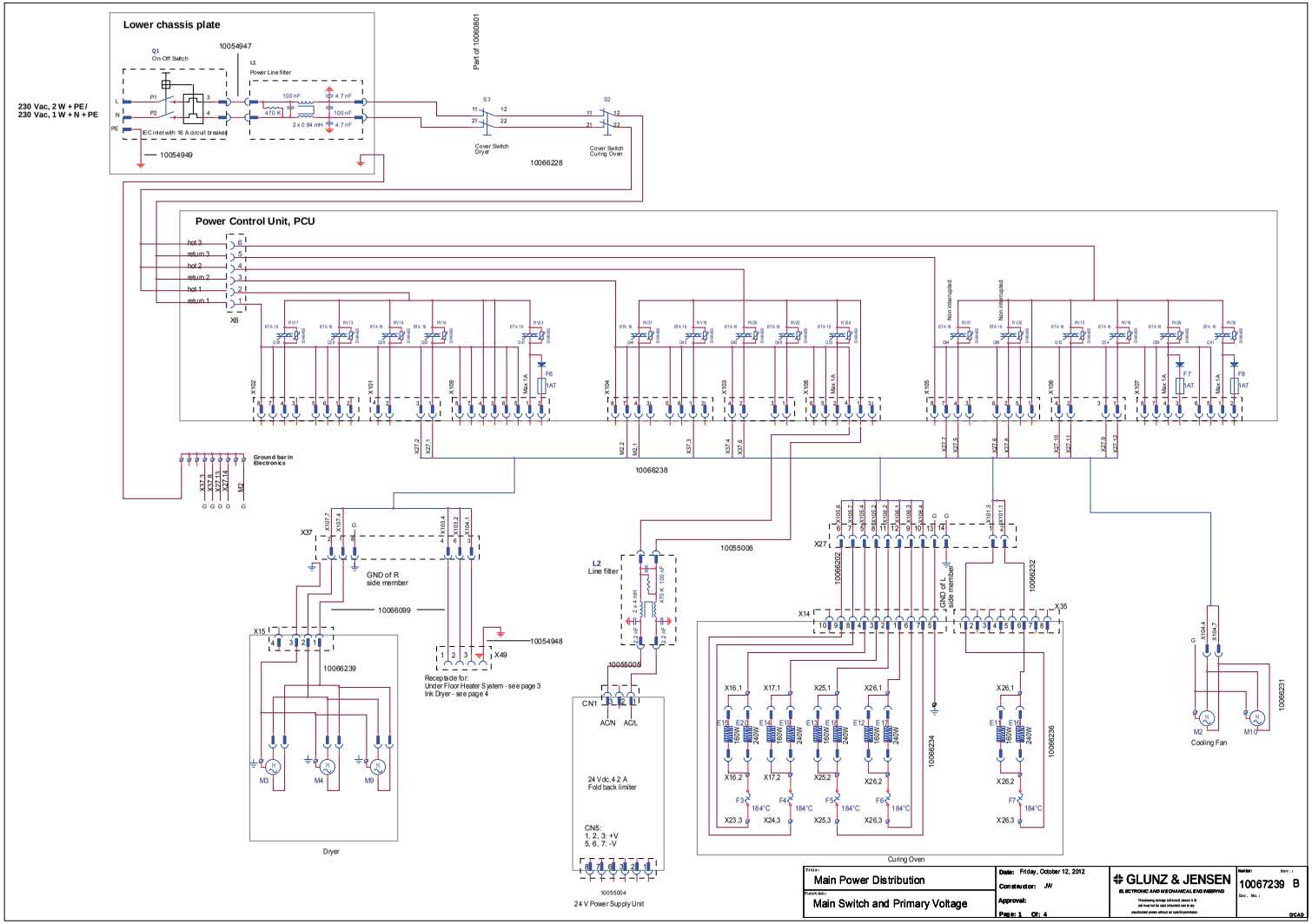
The diagrams (3 pages) cover:

- Page 1 of 3:
  Main power distribution
  Main switch and primary voltage
- Page 2 of 3:
  Low voltage wiring
  Sensors, switches, LEDs and motors

Page 3 of 3:
Printer plane
Wiring schematic

Main power distribution

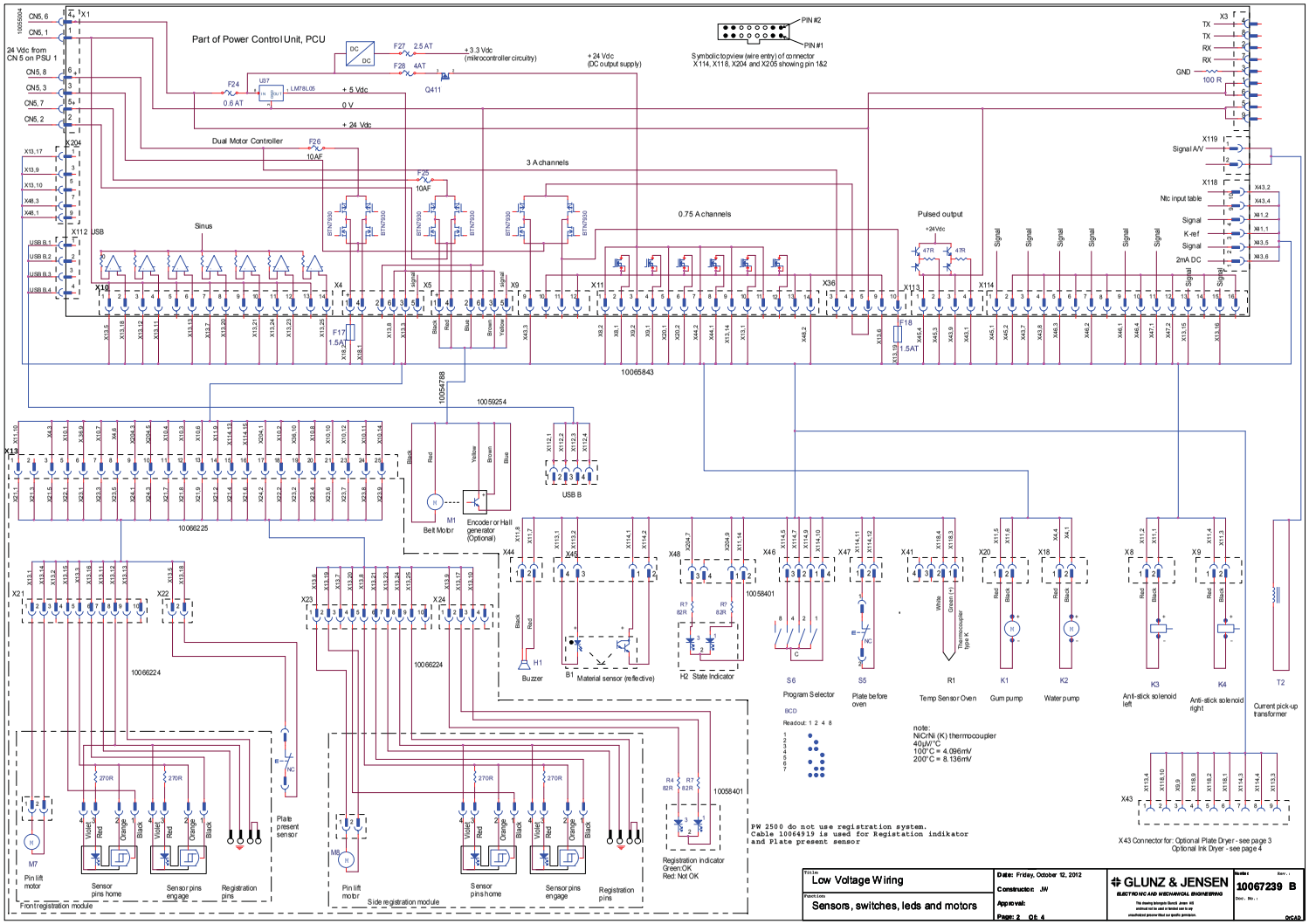
Main switch and primary voltage



Title: Main Power Distribution	Date: Friday, October 12, 2012	GLUNZ & JENSEN ELECTRONIC AND MECHANICAL ENGINEERING	Number: 10067239 Rev.: B
Sheet title: Main Switch and Primary Voltage	Contractor: JW		Doc. No.:
	Approval:		QCAD
	Page: 1 Of: 4		

Low voltage wiring

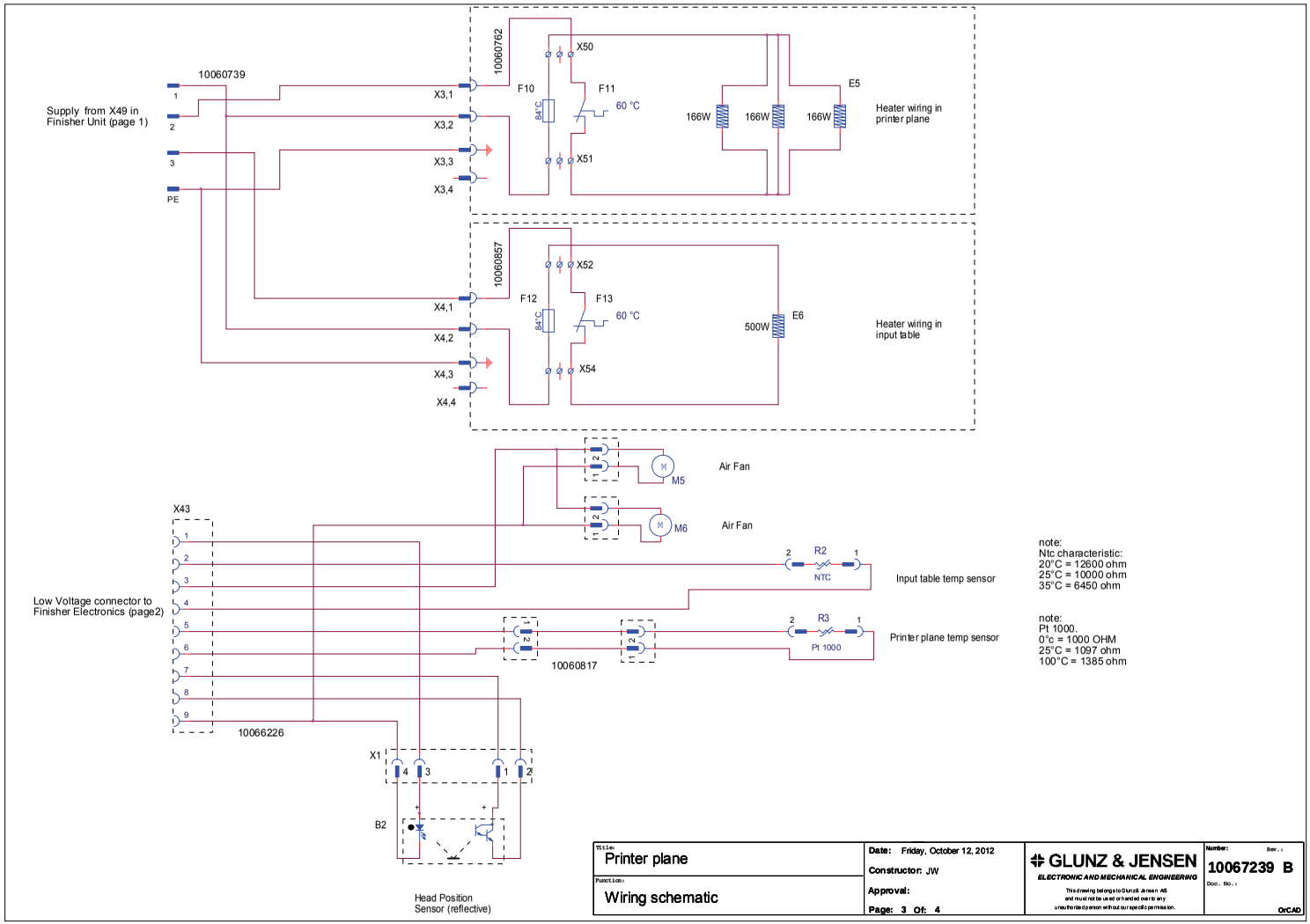
Sensors, switches, LEDs and motors



Title: Low Voltage Wiring	Date: Friday, October 12, 2012	GLUNZ & JENSEN ELECTRONIC AND MECHANICAL ENGINEERING	Number: 10067239	Rev.: B
Sheet Lists: Sensors, switches, leds and motors	Construction: JW Approval: Page: 2 Of: 4		Doc. No.:	
				OrCAD

Printer plane

Wiring schematic


10060739
Supply from X49 in Finisher Unit (page 1)
1
2
3
PE
X3,1
X3,2
X3,3
X3,4
10060762
X50
F10
F11
84°C
60 °C
X51
166W
166W
166W
E5
Heater wiring in printer plane
10060857
X52
F12
F13
84°C
60 °C
X54
X4,1
X4,2
X4,3
X4,4
500W
E6
Heater wiring in input table
M5
Air Fan
M6
Air Fan
X43
Low Voltage connector to Finisher Electronics (page2)
1
2
3
4
5
6
7
8
9
10066226
R2
NTC
Input table temp sensor
R3
Pt 1000
Printer plane temp sensor
10060817
note:
Ntc characteristic:
20°C = 12600 ohm
25°C = 10000 ohm
35°C = 6450 ohm
note:
Pt 1000.
0°c = 1000 OHM
25°C = 1097 ohm
100°C = 1385 ohm
X1
4
3
1
2
B2
Head Position Sensor (reflective)
Title:
Printer plane
Function:
Wiring schematic
Date: Friday, October 12, 2012
Constructor: JW
Approval:
Page: 3 Of: 4
GLUNZ & JENSEN
ELECTRONIC AND MECHANICAL ENGINEERING
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Number:
10067239 B
Doc. No.:
OrCAD